

MANUFACTURERS' RECORD

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Manufacturers' Record

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BALTIMORE, MARCH 7, 1907.

In the desire to increase the usefulness of the MANUFACTURERS' RECORD and to enhance its interest we have added to its regular features a department known as "Current Events As Viewed By Others." In that department, which will have no hard and fast limitations, we shall aim to present comments carefully culled from a variety of authoritative sources upon the topics bearing upon the welfare and advancement of the country. We do not expect that all of our readers will be interested at all times in all the selections, but we hope that every one of our readers will find in the department every week something of suggestive interest, and that as a whole the department may add to the value of the MANUFACTURERS' RECORD.

ELECTRIC COLUMBUS.

President G. Gumby Jordan of the Board of Trustees of the Public Schools of Columbus, Ga., has received from the Columbus Power Co. an offer of electric power for the operation for five years of the machinery of the Secondary Industrial School of that city. Under certain conditions as to machinery and appliances the company makes this offer, representing probably \$10,000 in value, under the conviction that it is aiding in the development of one of the most practical educational undertakings in the South, and the action of the company is certain to be a benefit in many directions, acquainting the students with the advantages of electricity, increasing as the years go by the practical interest of the community in electric

power, and tending to advertise still further one of the great assets of Columbus—its cheap power for industry.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 100, 101, 102, 103 and 104.

MISSISSIPPI PROSPECTS.

Many facts are throwing a light upon Mississippi's future. Not the least interesting of them is one made known in a letter to the MANUFACTURERS' RECORD from President J. C. Hardy of the State Agricultural and Mechanical College, in which he says that the present has been a great session for the college, with about 950 students enrolled, more than 100 of whom are paying their entire way by work. That is a fine showing for the Mississippi college, an attendance nearing the 1000 mark, and of that attendance more than 100 students working their way through. A young man who is willing and able to work his way through college is fit to be educated there and is really both settling a great example in self-reliance and self-dependence and a much broader kind of education than that provided for in the formal curriculum. He has in him the stuff of success.

ADVERTISING A CITY.

In view of the facts that the little State of Massachusetts, so small that it could be cut off from one corner of almost any of the Southern States without ever being missed so far as the area is concerned, has over \$1,000,000,000 invested in manufacturing, that Massachusetts has nearly as many cotton spindles as the 14 Southern States, and yet has more money in boots and shoes than in cotton mills, it would seem to the average man that the city of Boston, which is the very center and hub of this great industrial activity and wealth, would be measurably well satisfied with its business activity and prosperity. But not so. Some months ago the MANUFACTURERS' RECORD announced that Boston proposed to spend \$50,000 in a broad advertising campaign in order to present the advantages of that city to the world at large, and now comes the Edison Electric Illuminating Co. of Boston, which as an individual enterprise is carrying advertisements covering three full columns in the daily papers of that city presenting to the world the great advantages of Boston for manufacturing purposes and its own ability to supply the electric light and power for all classes of industries from the smallest to the greatest. The Edison Company in this exceedingly attractive presentation of the situation says:

This company will advertise largely during the next 12 months in promoting the industrial and electrical interests of Greater Boston and co-operating to the greatest extent possible with the Mayors, Selectmen and commercial bodies in general in developing a bigger, broader and busier Greater Boston. It also offers to send "intelligent elec-

trical representatives anywhere in the Eastern, Middle or seaboard States to show how electricity may be utilized industrially in Greater Boston," and to present "complete proof of the geographical, industrial and strategic importance of Greater Boston."

If Boston, with its vast wealth, with its manufacturing interests rivaling the total of many of the most progressive States in the Union, finds it wise and profitable to begin such a broad campaign of advertising as this, how much greater is the need that other cities and States, and even sections, should undertake similar work on an equally as comprehensive plan. It is quite probable that every day the Edison Company is spending, in order to attract outside attention, almost as much money as any city in the entire South, with one or two exceptions, spends in a year for similar work. There is in this a lesson not only for communities, but for individual business houses. When a great city such as Boston shows its appreciation of advertising as a means for expanding its business interests, no smaller community and no individual concern can afford to say that it does not need to advertise, nor to say that advertising judiciously done will not be profitable. Immediate results cannot always be secured, but this is no reason why progressive towns, cities and States and progressive business houses should not expand their advertising in order to expand their prosperity. We congratulate Boston and commend the action of the Edison Company in pursuing such a broad-gauged policy.

THE MAN AND THE PLACE.

The MANUFACTURERS' RECORD is in receipt of a letter from Basic City, Va., in which the writer says:

Your article on page 177 of the current issue under the heading of "Wanted: Men Who Can Do Things" is a corking good one and right to the point; but while you state the crying needs you do not state how the young men who can work and produce results, and who are ready and anxious to take up responsible positions of trust, etc., are to get in touch with such.

If you will introduce me to some such position I shall be but too glad to prove that there is one person who can "make good" and who is willing to hustle to produce results.

Last week we published a letter from a manufacturer who wanted a live, hustling, reliable manager, with some comments on the need of men who can do things. Our Basic City correspondent points out another need, that is, how such men shall come in touch with waiting opportunities. Broadly speaking, it may be said that for every boy or man willing to work and equipped with a sense of responsibility and devotion to work there is somewhere waiting an opening which would be profitable alike to him and to his employers, or somewhere there is an opportunity into which he would fit for the development of business. As there are thousands of positions waiting for the right men, so it is true that there are a great many men fitted for such positions, but

who do not know just where to make the connection. The adjustment is the difficulty. Very generally the boy or the man makes his own opportunity or he sees and seizes opportunities which others pass by without notice. This, however, is not always the case. There are sometimes environments which make this condition impossible. Our Virginia correspondent may be just the man to fit into the needed position mentioned in the MANUFACTURERS' RECORD last week. If so, the discussion of this subject, as on another page of this issue of the MANUFACTURERS' RECORD, will bring together the opportunity and the man to fill it.

"THE COMING DELUGE OF GOLD."

Under the above heading the MANUFACTURERS' RECORD published on May 18, 1905, some facts regarding the unprecedented production of gold, and gave an expression of its opinion as to the effect which this coming deluge of gold would have upon the world's affairs. The closing paragraph of that review of the situation said:

The stimulating effect of this huge increase in gold production, however, will not be confined to the United States. Mexico, Canada, Africa and the Orient will feel the awakening, the touch of this magician's wand, and coming just at the present moment, when all Asia is being stirred by the success of Japan—a country which 50 years ago was practically an unknown land—we may look for an outburst of industrial activity in the Orient rivaling, to some extent at least, that of the last half century in the United States. It would seem that the whole world is at the threshold of a period of advancement in material affairs and, necessarily, of a higher range of prices and of an advance in wages such as mankind has never known.

We recall the prediction made at that time, and reiterated again and again since then, "of a higher range of prices and of an advance in wages such as mankind has never known," in order once more to emphasize this truth. What the MANUFACTURERS' RECORD then foresaw is now to some degree being appreciated by the country at large through the remarkable advance in wages which is steadily taking place. Over and over the MANUFACTURERS' RECORD, in discussing this subject, pointed out that during this changing period in the world's affairs there would be great unrest among the laboring people, who, forced by the increasing cost of living, would demand and gradually secure a very much higher range of wages. It was urged that all employers of labor should themselves recognize the justice of this situation and voluntarily initiate a general advance in wages and in salaries commensurate with the increased cost of living. This readjustment has not yet been completed. No one need imagine that we have seen the limit of the higher cost of materials of all kinds, of wages and of living. It required no special ability to point out more than a year ago that these conditions would result in a large decline in the value of fixed income properties such as bonds, nor to see that the buyer or the borrower of money would have to pay a very much

higher rate for it than he had been accustomed to give. This phase of the subject was repeatedly pressed upon the attention of some personal financial friends, but they could not see it that way, and, on the contrary, took the ground that by January and February of this year there would be a plethora of money seeking investment in bonds and resulting in an advance in bond prices. Needless to say, this has not been the case. In its issue of February 21 the MANUFACTURERS' RECORD said:

We have been entering upon a new period in the world's economic conditions, and most of our financiers and railroad people have not yet realized that it is more than a passing matter of a year or two. They have been looking for an advance in the value of bonds and a lowering of the rate of interest. Repeatedly during the last year or two the MANUFACTURERS' RECORD has pointed out that the opposite conditions, just as we now see, were inevitable.

The fundamental reason for this change is found, as stated above, in the marvelous increase in the world's gold output. So great is this increase that it upsets all calculations based on previous business conditions, and the experience of the past is not altogether a safe light by which to guide our footsteps in the future. It is true that very many other conditions have come into play affecting the relation of the gold supply to trade, but these conditions all make for expansion of industry.

Repeating some of the figures published two years ago, we find that for the 10 years ending with 1850 the average annual production of gold for the world was \$36,000,000. For five years, from 1851 to 1855, the average was \$132,000,000, and during that period there was a great outburst of industrial activity and prosperity, not only in this country, but in others. The output of gold from 1855 to 1870 continued about the same as between 1851 and 1855. After 1870 there was a gradual decline to 1890. Between 1891 and 1895 the average rose to \$203,000,000, against an average of \$105,000,000 for the preceding 10 years. After 1895 there was a gradual increase, with but slight fluctuations, until today we are producing at the rate of \$400,000,000 a year. One of those psychological movements in human affairs, sometimes almost beyond explanation, is now seen in the wide and at times wild activity in gold-mining securities. It is quite probable that many of the companies now being floated will prove a complete loss, and doubtless a good many millions of dollars will be swept away from small investors who are gambling in "wildcat" enterprises. But the general result of this movement will be the concentration of greater energy and greater capital in mining enterprises, resulting in a still larger gain in gold production. It is quite safe to look for a rapid increase within the next few years to \$500,000,000, and not far away to \$600,000,000 a year. There really seems to be almost no reasonable limit to what we are to see in the world's output of gold within the next 10 or 20 years.

During the first half of the nineteenth century the total production of gold was \$787,000,000, while during the second half it amounted to \$6,900,000,000. For the first time in the history of the world the production of gold exceeded \$200,000,000 in 1896, while in 1903 the output was about \$350,000,000, and now is running at \$400,000,000 or more a year. In other words, two years' production now will largely exceed the total production of the first half of the nineteenth century. The production of the last 11 years from 1896 to 1906, both inclusive, was \$3,319,000,000, or considerably

more than the total production of the world from 1492 to 1850. The world's production from 1492 to 1895, a little over 400 years, was \$8,700,000,000. Allowing for a continuation of the rate of increase of gold production during the last few years, the total output in the 20-year period between 1896 and 1916—11 years now passed and 9 years ahead—will be greater than the world's production between 1492 and 1895. Between 1851 and 1895, both inclusive, the output was \$5,552,000,000, or an average of about \$120,000,000 a year. We are now running at the rate of \$400,000,000 a year, and within a few years will, as stated, probably have a world output of gold of \$500,000,000 to \$600,000,000 a year.

In studying these figures every thoughtful man must be impressed with their significance and with the tremendous influence of this gold output upon expansion of the world's trade and commerce, of a steadily rising cost of living, which necessarily means high wages, of a great increase in the value of landed properties, agricultural as well as coal and ore and cement and timber, and all other forms of property, whose values, unlike those of bonds and mortgages, are not limited to a fixed rate of income. Temporary reactions will not count very much in halting this upward and forward movement. Its end is not yet in sight, though no one would be so foolish as to say that in the readjustment of the world's business to these conditions there may not be some sharp reactions. Looking out over the whole world, we see a situation unlike anything in human history. For half a century this country and a few others have been gradually but surely expanding their manufacturing interests, their commerce and their wealth. At times it has looked as though this expansion in iron and steel and cement and kindred interests, especially in the United States, in Germany and in England, instead of being gradual, was on a scale of vast magnitude, but what these countries have done is only the beginning of what is before them and of what is before the entire world.

We are apt to forget that other lands may do great things. We forget that the commerce of Great Britain, for instance, is far larger per capita than ours; that if the foreign trade of the United States in proportion to population were as great as that of Great Britain our foreign trade would be \$12,000,000,000 a year instead of \$3,000,000,000. But we console ourselves as a nation that Great Britain lives upon its foreign commerce, while we have a trade at home vast enough to employ all of our activities. Granted that at present this is true, we gain new light upon the world's commerce and trade activity when we remember that Argentina has a foreign trade of nearly \$600,000,000 a year, or a per capita of over \$100. If we were doing a foreign trade equal per capita to that of Argentina it would be \$8,500,000,000 instead of \$3,000,000,000 per year. The commercial activity of Argentina is being matched by the tendency to industrial development there and in Brazil and other South American countries. Mexico is vying with the United States in mineral development; Japan and the Oriental world in general are awakening to the limitless possibilities for expansion in manufacture, in domestic trade and foreign commerce. We talk about the feverish rush of our industrial and railroad life, and forget that in Germany and some other countries railroad congestion is almost as severe as in the United States. The

world has simply outgrown its facilities for trade. Its condition may be compared to that of a freight train to which one car after another has been added until the strength of the locomotive is unequal to the strain and its work is done only under a great disadvantage and much more slowly than the train ought to be moved. As that train needs more motive power in order to be handled to advantage, so the whole business world needs more facilities with which to handle its expanding trade and commerce. Under this amazing expansion, due largely to the development of the steam engine, electric power, the telephone and other modern labor-saving things, all now uniting with this great deluge of gold, which, like the magician's wand, is touching the dormant energies of mankind and quickening them to unprecedented activity, the imagination halts as we try to grasp the wonders of the coming years.

LET SLEEPING DOGS LIE.

When in personal correspondence six weeks ago, the MANUFACTURERS' RECORD made known to one of the promoters of the proposed Southern Commission on the Race Problem and to a dozen or more other Southern gentlemen its definite convictions against the commission, it was confident that the intelligent patriotism of the South not already committed unawares to the foolish project would be in harmony with its position. It was intended, after sufficient preliminary campaigning by correspondence or by personal interviews had ripened the time for an emergence of the scheme into publicity, that one of the Legislatures of the South—and the one could be readily named—should pass a resolution requesting the Governor of that State to invite the other Governors in the South to appoint three representative citizens from each State to meet as a commission for the formulation and promulgation of a pronouncement as of the South on the relations of the whites and blacks. The fact that "financial sponsorship" for the scheme had been assured added to the menace in its possibilities without weakening its absurdity and compelled the MANUFACTURERS' RECORD, in great reluctance, to let in some light upon the project a month ago. Subsequent developments have demonstrated the soundness of the public mind of the South on this question understood by the MANUFACTURERS' RECORD from the moment that its cooperation was sought in furtherance of the scheme. That soundness has been emphasized by the reception given to the plain spoken, sensible, straight-to-the-point letter of Governor Claude A. Swanson of Virginia, one of the eight Southern Governors already known to view the project with disfavor. The newspapers of Virginia have been prompt in commendation of his timely and effective letter, and one of them, the Staunton Dispatch and News, was especially happy in comments applicable not only to the scheme of the moment, but to others of the kind. It said:

We want to commend Governor Swanson for declining to send delegates to a proposed conference on the race question, at which delegates are asked to come from all the Southern States. The Governor properly says there is nothing to settle in Virginia, and he can see no good to come of a conference.

It is very common for a lot of faddists to get up a convention to consider some great social or economic problem, and to give it standing they appeal to Governors, Mayors, etc., to appoint delegates to it. Most such gatherings are for "hot-air" purposes, to use a slang expression, and do more harm than good. We have never been able to understand where a Governor or Mayor finds authority for making such appointments and

committing the State or city, as the case may be, to the propaganda put forth by such gatherings. We do not believe the Governor of Virginia has the right to appoint delegates to any gathering unless the Legislature authorizes it by regular enactment. He should not take it upon himself to commit his State to any line of policy unless the representatives of the people shall have passed favorably on it. * * * It is very mischievous, out of mere courtesy, to give support to movements that may prove very serious and very harmful. The Governor cannot serve his State better than by standing aloof from all movements, so far as he is officially concerned, that have not received the support of the representatives of the people.

The Dispatch and News makes a point worthy of the most careful consideration by State and municipal authorities in questioning their authority to appoint delegates to this or that gathering. The appointments, which are becoming fewer and fewer, are doubtless made without any idea on the part of the appointing power that it is committing the State to any action that may be taken by the gathering. But anyone who, like the MANUFACTURERS' RECORD, has made careful, special and sustained study of conferences, conventions, congresses, parliaments and commissions during the past 10 years, especially those dubbed "Southern," knows that the promoters of such gatherings have systematically used such appointments to create an impression upon the public mind that the majesty and influence of the State was represented rather than the good nature of the appointing power.

Another view of the subject is given in the following by the New Orleans Picayune:

Some of our good Southern people, well-meaning without doubt, but wrong-headed in the extreme, are constantly agitating sectional and race questions as if they actually desired to court Federal interference. They have a burning desire to get money out of the National Treasury for various educational and other local supposed benevolent schemes, and they seem to care nothing as to the cost in the overslaughting of the rights of the States and in establishing despotic domination by the National Government over the South's internal affairs. Such tendencies are highly mischievous, and they ought to be resisted by our people to the utmost. The example of the Governor of Virginia in the premises is greatly to be applauded in the premises.

In the very center of part of the Southern promotion of the movement the Atlanta Journal published the following:

What good can be accomplished by such a conference as that proposed by those well-meaning but misguided altruists?

The only result would be, as pointed out by Mr. R. H. Edmonds of the MANUFACTURERS' RECORD, "to hold out hopes absolutely beyond the possibility of realization."

No one will deny the interest in the South shown by Mr. Edmonds. No one will deny the qualifications of those Governors who have declined to enter into this conference. They are men who are entirely familiar with the South and its great problem. They have faced the question in all its phases all their lives, and they are entitled to full faith and credit when they say that no good could result from such a conference as that proposed.

Supplementing these expressions of sound opinion was the action of the Chattanooga (Tenn.) Press Club in its meeting for final organization in adopting resolutions congratulating Governor Swanson upon his attitude toward the commission idea and announcing "that the sooner the press of the country drops the discussion of the so-called 'negro problem' the sooner the matter will be settled." If the representative newspapers of the country accept that view and act upon it to the extent even of excluding from their columns what anyone, white or black, may wish to say about any phase of the relations of whites and blacks, they will immeasurably strengthen the hands of substan-

tial citizens of the South, not visionaries themselves nor the agents of visionaries in other parts of the country, for their task, demanding years of patience and perseverance, without publicity or personal profit, of eradicating false notions that have injured the negroes and of inculcating the principles which must prevail for the welfare of the negroes.

A TRUE FISH STORY AND ITS APPLICATION TO BUSINESS.

At Ocean View, a fishing spot near Norfolk, hundreds of boats congregate over the fishing grounds during a portion of every summer and the early fall. The fish are found in great abundance. They are caught, literally, by the thousands. A visit to that spot during the fishing season suggests some thoughts which apply with as much force to business matters as to fishing. One of the first things which strikes the "greenhorn" is the fact that all the boats huddle so close together that it looks as though the lines would become entangled. The "greenhorn," unaccustomed to this manner of fishing, and believing that he knows more about catching fish than his boatman, will often insist upon going a few hundred yards away from the other boats, feeling assured that where there are fewer fishermen there will be more chance to catch fish. The boatman, from long experience, knows better, but he is there to follow the instructions of the man who employs him to take him fishing, especially since the man, as if often the case, refuses to listen to his advice. But the lone fisherman off by himself soon finds that he catches very few fish, while the people in the boats huddled close together are very generally pulling them in with great rapidity, often two at a time and as fast as the line can be thrown over. What is the explanation? The boatmen say that the fish are drawn to the spot where the largest number of tempting baits are to be seen. The fish move in great schools. The spot where the lone fisherman is plying his vocation may be just as good feeding ground for them as the other where the boats are congregated, but the more lines that are overboard the more the fish gather in that locality, and apparently scramble for a chance to bite at every hook that comes their way so long as a piece of bait can be seen. You may fish on the wrong tide and waste your time and your money, you may fish by yourself and catch comparatively few, but if you fish with the crowd where a hundred boats are almost touching each other, and fish on the right tide, you are almost certain to have all the fun you want in the fishing line.

These facts suggest some thoughts applicable to business interests. If through advertising you are fishing for business, fish with the crowd, that is, advertise in such papers as the MANUFACTURERS' RECORD, where there are the largest number of other advertisers. Just as the hundreds of baited hooks draw the fish to that particular spot, so the hundreds or the thousands of advertisements draw the prospective buyer of machinery or supplies or other things to the columns of the newspaper which has the largest number and the greatest variety of advertisements. And if you are fishing for business, fish for it with redoubled vigor at the time when the fish are biting best; fish for it during the periods of greatest activity in the purchase of supplies and equipment of all kinds. Fishing may be made pleasant and profitable somewhere at all seasons, but the time for the biggest

luck is on the right tide in the right spot with the right bait and in good company. Just now there is marvelous business activity throughout the whole country. Every section is good fishing ground. The best spot of all is the South. The best way to reach it to the largest advantage is to be found in company with the greatest number of other business men. This is accomplished by advertising in the MANUFACTURERS' RECORD, whose advertising pages carry the names of over 1000 of the foremost business men of America. Now is the time for the great fun and the largest profit in fishing for business. The MANUFACTURERS' RECORD represents the best gathering in America of the best firms fishing for business. Do not make the mistake of the lone fisherman, who, in his vain delusion, thinks that because he fishes by himself there will be more fish and more sport, but remember that just as the hundreds of baited hooks draw to that spot the thousands of eager fish, so the thousands of advertisements draw to the study of the advertising columns of the MANUFACTURERS' RECORD thousands of prospective buyers of machinery of all kinds.

LESS HASTE, MORE SPEED.

In a letter to the MANUFACTURERS' RECORD an executive officer of one of the great railroad systems of the country says:

I am not at all in sympathy with the growing desire in twentieth-century railroading to maintain the terrific high speed; and, in fact, in the revision of our winter schedule last fall I demanded that our time should be spread out so as to make safety a consideration rather than speed. To read of these railroad accidents, clearly the result of reckless speed, should make the blood of railroad managers chill, especially those who have the desire to rush through space without regard to its dire possibility.

Many recent deplorable events have emphasized the truth of the saw, "Less haste, more speed." In railroading, particularly, attempts to make haste involve a strain not only upon the physical properties of the roads, but also upon the nervous system of the human agencies, from president to brakeman and signalman. In the effort to make haste in meeting the demands of traffic and increasing the earnings of a railroad the executive office is tempted to put track, train and employees to a strain to which none is equal, and employees are tempted to take risks in carrying out orders that their better judgment tells them are dangerous. The mechanical department of a railroad knows that the boiler of a locomotive is capable only of so much, and that a certain kind of rail, especially on a curve, can be subjected in safety only to a certain amount of weight and speed of a train. The block system may be absolutely perfect as far as mechanics are concerned, but may be worse than useless if the human element at either end of the block is, through incompetency or exhaustion, defective. The employment of men because they are cheap or the keeping of men at work too many hours for like reason of economy is only one phase of the inclination of railroads to maintain a terrific high speed either in their financial departments or in their operating departments. That railroad disasters happen by bunches of different kinds—that is to say, that one rear-end collision is followed by half a dozen others, that the derailment of one train in one part of the country is almost duplicated in another—is no mere coincidence. The accidents are the logical results of railroads competing with one another in high-pressure management and opera-

tion. A 50-mile-an-hour train on one road leads to a 60-mile-an-hour train on another, not always with the whole stretch of the run laid with rails capable of holding safely a train running at 40 miles an hour. That railroad executives are beginning to realize the essential or safety as compared with speed is a promise of a much-needed return to reason in the operation of railroads which may be reflected to the satisfaction of users of railroads in more directions than one.

HAVE YOU LANDS FOR SALE?

Adams & Boyle & Coates, real estate, insurance and loans, of Little Rock, Ark., writing under date of February 26, say:

We are very anxious to build up Arkansas, and believe the only way to do it is to get the matter thoroughly before the public, and we have found your paper to be the best medium of advertising.

That is a fair sample of letters that we are getting from many advertisers in our "Classified Opportunities" Department. Have you property of any kind to which you want to call the attention of buyers? If so, consider this statement of Adams & Boyle & Coates and act accordingly.

COTTON YARNS.

And now France is going to raise cotton for its own mills. A dispatch from Paris tells of the efforts of the French Colonial Association to encourage colonists of France to raise cotton. Such dispatches have long since come to be recognized as tenders of the speculative cotton market discounted by obvious facts of 50 years.

MUNICIPAL BONDS FOR SALE.

Municipal authorities in considering the question of selling bonds should bear in mind a letter from R. H. Brown, Mayor of Delhi, La., who, under date of February 16, writing to the MANUFACTURERS' RECORD about an advertisement offering bonds for sale, says:

We got splendid results from one issue of your journal.

STATE-MADE IRON.

That State penitentiaries can be managed on profitable lines both for the benefit of the State and the men incarcerated is evidenced by the report of a subcommittee to the Texas House of Representatives concerning the condition of the State penitentiary at Rusk. A furnace is operated on ore from the State's lands, the pig-iron manufactured is made into water pipe, sad smoothing irons and other castings, the demand for these products far exceeding the output, and the pipe foundry is being increased with a view to increasing its output materially. A furniture factory is also operated, and hardwood furniture from the lowest to the highest grades is manufactured. The State owns from 4500 to 5000 acres of timber lands and timber rights near the terminus of a standard-gauge railroad, also owned by the State, and it was shown that it is the intention of the officials to extend this line to this section and equip and operate a sawmill. The committee suggested that this railroad be extended to Palestine to connect with the International & Great Northern Railroad, and also extended north some six or seven miles to connect with the Texas & New Orleans Railroad. This would greatly increase the shipping facilities of the penitentiary, which amounts at the present time to about \$60,000 a month.

THE COTTON MOVEMENT.

In the first six months of the present season, according to Col. Henry G. Hester, secretary of the New Orleans Cotton Ex-

change, the amount of cotton brought into sight was 11,071,484 bales, an increase over the preceding year of 2,303,002 bales. The exports were 6,294,449 bales, an increase of 1,654,891 bales. The takings were, by Northern spinners, 1,932,852 bales, an increase of 211,517; by Southern spinners, 1,487,218 bales, an increase of 78,021 bales.

OPEN-HEARTH STEEL.

That the open-hearth method of converting pig-iron into steel is becoming more and more recognized every day by metallurgists generally as producing a better quality of steel, particularly for rails, is indicated by a constantly-increasing substitution of this method for the Bessemer process. This change of opinion among leading steel men of the world and the causes thereof were treated at length by Benjamin Talbot of Middlesbrough, England, in a recent article in the London Times' engineering supplement. The causes—three in number—which Mr. Talbot assigns for the decadence and possibly the disappearance of the Bessemer process are: 1. The ever-growing scarcity of iron ores suitable either for the acid or basic Bessemer processes. 2. The superiority of the product obtained by the open-hearth processes of manufacture. 3. The cheapening of the production of the steel ingot by modern open-hearth methods of manufacture.

The ores from which pig-iron is made for use in the acid Bessemer process must possess certain percentages of chemical properties that are absolutely essential, and where there is a lack of these properties it is necessary to use other ores which will supply them or some substances which possess the ingredients needed. And it is to the steadily-decreasing supplies of these ores and their consequent increase in price that Mr. Talbot assigns as the most cogent of the three causes named.

In England the ores suitable for the acid Bessemer process are not available in large quantities, and the main supply has been the Spanish ores from Bilbao, and these ores are yearly becoming both scarcer in quantity and poorer in quality. Consequently the return to the open-hearth process has been large, as is indicated by the British Iron Trade Association's figures for the first half of 1906, which show a production of 2,196,853 tons by the open-hearth method and 919,620 tons by the acid Bessemer method, being an increase of 216,758 tons by the former method and a decrease of 106,267 tons by the latter.

In Germany the basic Bessemer process has had a large ascendancy over the acid Bessemer process, owing to the invention of the dephosphorizing process by Sidney Gilchrist Thomas, which rendered possible the utilization of the immense native phosphoric ore deposits of Germany and Luxembourg. The figures for 1905, published by the Association of German Iron and Steel Manufacturers, show a production of 424,196 tons by the acid Bessemer process and 6,627,902 tons by the basic Bessemer process.

In the United States the ores suitable for the acid Bessemer process are located in the Lake Superior region, while there are practically no ores available for the basic Bessemer process outside of the Southern States and a portion of Northern New York. These latter ores are converted into steel by the open-hearth process, and so efficient have been the rails made from them that to compete with them the United States Steel Corporation is substituting the open-hearth process for the acid Bessemer process in many of its important plants.

The margins for economies in the Bessemer process is less, says Mr. Talbot, than any which can be made in the basic open-hearth process, and unless a radical change

is made in the operation of the Bessemer furnace only small further savings appear possible. Even in cases in which the blowing power is obtained from surplus blast-furnace gas products are absorbed which could otherwise be economically and usefully employed in creating power for other purposes if the open-hearth process were employed.

It appears, therefore, adds Mr. Talbot, that unless large deposits of pure ore are found and are continually developed to keep pace with the increased consumption of iron all over the world, the cost of Bessemer iron will go up, and other ores capable of making pig-iron which cannot be permitted in the acid Bessemer process will be used instead. By these means the manufacture of rails will pass to the open-hearth process.

The turning back to the open-hearth method of converting pig-iron into steel after having been displaced for so long by the Bessemer process, which at the time was considered permanently revolutionary, is naturally fraught with much significance to the South, which is so abundantly supplied with ores that are suitable for the open-hearth method. This change of sentiment tends to still further accentuate the indication that the future predominance of steel production will rest in the South.

THE SOUTH PUSHING FOR TRADE INTO THE NORTH AND WEST.

In many directions Southern manufacturers are pushing out not only for trade in the South, but for trade in other sections as well as abroad. A few weeks ago we called attention to the fact that one of the large foundries and machine shops of Georgia was doing a very heavy amount of regular work in making castings for a big concern in the West, and, by the way, some of these castings are shipped West and go to make up parts of exceptionally heavy machinery, much of which is being reshipped South.

Another illustration of a Southern house pushing into the North is given to the MANUFACTURERS' RECORD by the Mahony Heating, Ventilating & Blower Co. of Troy, N. Y. This concern had been looking for some time for some special staybolts, and had hunted through the advertising pages of some of the largest papers in the country when they discovered in the *Daily Bulletin of the Manufacturers' Record* an advertisement of the C. B. Ford Company of Richmond, Va., who make exactly the kind of bolt wanted. Investigation proved that for their purpose these Richmond staybolts were superior to what they had been using, and were just what they needed. The result was an order to the Ford Company for staybolts; but, as in many other cases, the Mahony Heating, Ventilating & Blower Co., so they advise us, entirely overlooked mentioning to the Ford Company that it was through the *Daily Bulletin of the Manufacturers' Record* that they had been brought in touch with them.

While it is true that the MANUFACTURERS' RECORD covers every part of the South, it is likewise true that it is widely read throughout the North and West, as well as abroad. Thousands of people in other sections are watching the MANUFACTURERS' RECORD every week with great care in order to keep in touch with the marvelous development of the South. But the MANUFACTURERS' RECORD is more than a sectional paper. It is really national in its scope, and is, indeed, the business man's paper, whether the business man be in Virginia, or Alabama, or Texas, or whether he be in New York, or Pennsylvania, or Ohio, or Wisconsin. Broadly covering, as it does, the great problems of transportation by rail and water, the great economic questions affecting the development of the country, the MANUFACTURERS' RECORD is

invaluable to people of all sections. Hence advertisers not only find it the best possible medium for reaching the South, but they find it likewise of very great value for reaching business people throughout this country and in many foreign lands.

HIS QUESTION ANSWERED.

A few weeks ago a business firm of New York wrote to a number of companies advertising in the MANUFACTURERS' RECORD in an effort to size up the value of the MANUFACTURERS' RECORD as an advertising medium. Several who responded have sent us copies of their letters, and we quote the following specimens:

"Yours of 7th asking for information as to whether or not the MANUFACTURERS' RECORD reaches the industrial South received, and beg to advise that we do not know of any better advertising medium than this journal for reaching practically every trade and industry in the Southern States, and you can make no mistake in giving them your ad."

That letter was from the W. E. Austin Company of Birmingham, Ala., agents for some of our advertisers. Another from the Morris Sherman Manufacturing Co. of Chattanooga, Tenn., contains the following:

"We have found from actual experience the MANUFACTURERS' RECORD to be the best advertising medium in this country, as well as in foreign countries. We may say to you that we received inquiries from our ads. in the MANUFACTURERS' RECORD from nearly all parts of the globe, which surprised us many times really that this paper has such a circulation. We have used nearly all the trade papers of that class, but have discontinued our ads. in all of them except in the MANUFACTURERS' RECORD, as we found the others did not pay us, with the exception of one in your city published for foreign business exclusively. We can, therefore, tell you without hesitation that if you use the MANUFACTURERS' RECORD, judging from our experience, you will have all the inquiries that you are looking for, and if your goods have the merits you claim for them it will be the best investment in the way of advertising that you can make."

BIRTHDAY GREETINGS.

Achieved Wonderful Results.

[Raleigh (N. C.) Times.]

The MANUFACTURERS' RECORD of Baltimore has closed a quarter of a century of work for the development of the South. It has achieved the most wonderful results. There is no other paper that comes within striking distance of it, and it grows better with age. Its loyalty to the South, its value to our people, can never be estimated.

Of Service to the South.

[Charlotte (N. C.) Chronicle.]

No publication has more zealously fostered the industrial development of the South than the MANUFACTURERS' RECORD, edited at Baltimore by Mr. Richard H. Edmonds. It has been an active and vigorous champion of the South's welfare, and its influence has been of great service to this section. The MANUFACTURERS' RECORD last week entered upon its twenty-sixth year, and more than maintained the high standard which it long ago attained.

In Upbuilding the South.

[Charlotte (N. C.) Observer.]

With the current issue of the MANUFACTURERS' RECORD of Baltimore that "Weekly Southern Industrial, Railroad and Financial Newspaper" closes its twenty-fifth year. From the smallest of beginnings it has grown to be the most influential publication of its kind in the United States, and has been a factor of very great importance in the upbuilding of the South. To the campaign for Southern development it has

lent itself with whole-hearted zeal, sparing no expense of work or money and treating the interests of the whole South as its own.

* * * And in all these years the MANUFACTURERS' RECORD has held that the people of the South should be loyal to their traditions. It has thoroughly recognized that the loss of self-respect could be counterbalanced by no material prosperity, however great, and has energetically given its voice against the acceptance of charity-subsidy. To the paper and its editor, Mr. Richard H. Edmonds, the South owes a debt of gratitude, and the *Observer* takes great pleasure in extending cordial anniversary felicitations.

High Ideals, Broad Methods.

[Staunton (Va.) Dispatch.]

The MANUFACTURERS' RECORD of Baltimore, the South's great industrial paper, which has done more than any other one agency within the same time to build up the South, the representative of high ideals and the advocate of broad methods, has celebrated its twenty-fifth anniversary. Every Southerner will rejoice in the success of this great journal.

Instrumental in Development.

[Harrisonburg (Va.) Times.]

While the success of the MANUFACTURERS' RECORD as a newspaper venture is a source of gratification and of profit to its owners, yet it seems to us that their greatest satisfaction must arise from contemplating the wonderful development of the country and the knowledge that they have been so powerfully instrumental in bringing it about. May the MANUFACTURERS' RECORD prove as successful and as useful during the next 25 years as it was in the 25 which have just ended.

Publication of Merit.

[Gulfport (Miss.) Record.]

With its last number the MANUFACTURERS' RECORD of Baltimore completed its twenty-fifth year. These have been 25 years of useful activity in which that great publication has never lost a single opportunity to advance the interests of the South. Indeed, it may be stated with every degree of truth that no other single agency has done so much to develop the South's resources and keep constantly its advantages before the people of the country. The MANUFACTURERS' RECORD is a credit to its makers, an honor to the South, and the wish goes out that it may live to enjoy many more years of usefulness and prosperity.

Recognized as a Pioneer.

[St. Augustine (Fla.) Record.]

In celebrating the close of its first quarter century of active work in the upbuilding of the South, the MANUFACTURERS' RECORD has the congratulations and best wishes of the newspaper fraternity the country over. No agency has been more potent in advancing the interests and welfare of this section of the Union than this great magazine recognized everywhere as the pioneer in making known the resources of "a land flowing with milk and honey."

Sources of Gratification.

[Columbia (S. C.) State.]

We imagine, therefore, that viewing its history of a quarter of a century, and knowing his part in that history, it is more gratifying to Mr. Richard H. Edmonds, editor and general manager of the Manufacturers' Record Publishing Co., to point to the achievement represented by that industrial and financial journal on its twenty-fifth birthday than it would have been to direct attention to a pile of \$50,000,000 gained in a struggle for dollars. * * * The *State* congratulates Mr. Edmonds on the MANUFACTURERS' RECORD, and the MANUFACTURERS' RECORD on

having the co-operation of those who make it what it is.

"The South's Exponent."

[Wilmington (N. C.) Morning Star.]

The MANUFACTURERS' RECORD, the South's great industrial publication, has just closed 25 years of its useful existence. The *Star* feels like congratulating that superior paper upon rounding out that quarter of a century, but we feel that the congratulations more properly belong to the South, which has been the beneficiary of the great achievements won by the MANUFACTURERS' RECORD. It has been a powerful force in the development of the South, and we know of no one agency that has done more to attract attention to the resources of this section and exploit them in all manner of ways.

The MANUFACTURERS' RECORD has given Southerners confidence and encouragement in the marvelous industrial progress that they have made and has attracted to our immense resources untold capital from abroad. Under the directing hand of Mr. R. H. Edmonds the paper has achieved a high rank among American publications, and it is with pride that we can point to it as the South's exponent in progressiveness and development. Mr. Edmonds has made it a power in the land, and today that gentleman is our authority for statistics and our advocate for progress. The tremendous circulation of his publication attests the high appreciation in which it is held throughout the South, and if we could sow with a view to reap further industrial development of the South we could think of nothing that would so thoroughly produce the harvest than to broadcast the MANUFACTURERS' RECORD.

For Southern Progress.

[Railway World.]

The MANUFACTURERS' RECORD of Baltimore has completed its twenty-fifth year. Probably no publication has done more for the progress of the South in a quarter of a century than has this very ably-conducted journal.

Realizing Home Resources.

[American Cotton Manufacturer.]

Last week the MANUFACTURERS' RECORD of Baltimore celebrated its twenty-fifth anniversary. The story of its growth has been the story in large measure of the "amazing progress of the South." No journal in the country has had more to do with the material prosperity of the section in which it moved and had its being. Its greatest work has been the bringing of the Southern people to a realization and appreciation of the vast natural resources of this Southland, "the goodliest on which the sun e'er shone." From a section discredited at home and abroad the South within this quarter of a century has grown to be a giant in industrial enterprises.

Danger Point Passed.

[Newbern (N. C.) Journal.]

The MANUFACTURERS' RECORD of Baltimore has completed a quarter of a century in its publication. It has been a period when such a periodical was needed to stand up for the South and its material, social, industrial and educational affairs. The MANUFACTURERS' RECORD has done all this, and more. Not merely a champion, it has moved at the head of the progressive procession. It has given warnings and advice, and been fearless in both. There were hard seasons during the MANUFACTURERS' RECORD's 25 years and struggles for the section it has been so representative of. But today, passing its twenty-fifth anniversary, it can feel the danger point, so far as the South's material stability is concerned, has passed, and this section only needs a conservativeness to keep the gains made and go forward to others yet attainable.

Healthy Reaction Against Educational Trust Movement

[Written for the Manufacturers' Record.]

Instead of giving a coup de grace to opposition to the Educational Trust persistently in evolution during the past nine or ten years, the recent \$32,000,000 accretion to the treasury of the Trust has, in its very enormity, so emphasized the wisdom and foresight of the opposition as to develop a healthy reaction against the program of the Trust. This phenomenon must, however, not be permitted either to turn into drastic retaliatory action against individuals or institutions that have acted from good motives, however mistaken, and according to their best light or to beget a spirit of superconfidence at the cost of the eternal vigilance that will be required for years.

Typical of the growing inclination is a thoughtful suggestion of the *Daily Sun* of Jackson, Tenn., as follows:

The South should establish, regulate and control its own schools and universities, and so far from accepting such institutions as "gifts" should prohibit their establishment; for a people, a nation or a section are like a family, and their national and personal independence of character cannot be maintained if they are taught to look to outsiders for the training and support that their country or their own family owes them.

Somewhat more emphatic is the utterance of the *Times-Dispatch* of Richmond, Va., which says:

The Times-Dispatch has always opposed government aid to public schools for one reason, among others, that if the government should give money to the Southern schools it would naturally insist upon having a voice in the management of the schools. For the same reason we should be opposed to any Rockefeller donations to Southern schools if they carry with them a condition that the General Education Board, or Mr. Rockefeller, or any Northern man or syndicate should "determine the character of American education."

Even an unfortunate mind which occasionally discusses education in the editorial columns of the *News-Leader* of Richmond, Va., with one eye cocked toward the cash and with vituperation as its only answer to facts, is compelled to say:

A jealousy of Southern advice or control in Southern institutions to which the help from without has been applied; east-iron rules against any help or institutions for which public aid is given here and over which, consequently, local authorities may have some control—these seem to indicate a deep-rooted distrust of Southern people, the determination that they shall have no part except that of lookers-on, or mere advisers whose advice may be contemptuously disregarded. . . . We shall insist, however, that the self-respect of the Southern white people shall be regarded, and that when their co-operation is invited in the disposition of these funds the invitation shall be in good faith. The appearance of jealous determination that Southern white people shall not direct the disposition of this money for schools on their own territory and that Southern officials be not allowed to share in disposing of it does not make a happy or reassuring condition.

An extreme policy to be adopted is that suggested by the *Evening Journal* of Richmond, Va., as follows:

Unless we mistake the character and temper of our people, it will not be long before the mere suspicion that a man or an institution down here is an agent or a beneficiary of the General Board of Education will cause them to be shunned like the plague. We are not very rich, but we are not sycophants or paupers.

On the other hand, the *News and Courier*

of Charleston, S. C., which has rendered effective service in combating the various tentative approaches of the Educational Trust upon the common intelligence of the country, verges upon an optimism which is hardly warranted by the situation. It says:

If there be any ground for the suspicion directed against the General Education Board, the States have in their universities and colleges absolute protection, for it may yet be said that there are few Commonwealths not amply able to sustain institutions that will always be respectable by the side of those cherished by private munificence, however unlimited may be their wealth. . . . The weapon for the prevention of an Education Trust is the State college. . . . It behooves the State, as the shadow of a Rockefeller College Trust approaches, the more zealously to guard the schools which belong to the people.

Individuals and newspapers that have been combating this Educational Trust ever since it emerged into publicity five or six years ago, or that have at last changed from defenders or supporters to critics or opponents, should not forget that they are dealing with a most adroit and determined aggregation having at its disposal millions of dollars capable of being used in most unexpected ways. They should remember that, as the young negroes at Tuskegee, a special protegee of the Ogden Movement, are taught to tread softly and to walk warily in public, so the Educational Trust is endeavoring to combine diplomacy with its power of money, discussing minor matters when essentials are assailed, shifting its positions as conditions become too strenuous for it, ostensibly yielding this or that point, but, nevertheless, unalterably resolved to build up what it calls its "System" for the country and calculating upon various devices for the division of effective opposition to it. They should not forget that success of this "System" can only paralyze State institutions, high and low, denominational institutions and private establishments as weapons against the Educational Trust. The influences toward this paralysis are deft and subtle. Frequently they are perceptible only to the individuals who have followed the Educational Trust Movement in all its sinuosities and squirmings, and, having at hand a mass of illuminating material, are able to put apparently widely separated facts into actual juxtaposition.

Comparatively few persons, for instance, understood the significance of the statement made in May, 1902, by Dr. Robert C. Ogden, when, in discussing the plans of the General Education Board, the Southern Education Board and the Conference for Education in the South, he said:

It is planned, with the association of these two boards, for the promotion of the idea of education and for the handling of money, to create a community of interest, a clearing-house—the work of the Peabody board, the work of the Slater board, the work of the Southern Education Board, and the work of the last board, which is called the board of the General Education Fund—and thus to concentrate the highest intelligence, the result of the best experience and all economies in such a way as to prevent duplication of this work and to insure the best application of money.

With that must be read the announcement of the early winter of 1906 that the General Education Board and the Carnegie Board for pensioning professors had reached an informal understanding "that in all matters affecting the development of

higher education the two boards will endeavor to work in harmony," and the complementary announcements following the gift of \$32,000,000 to the Educational Trust. Full of suggestion to minds hoping that State colleges may provide the antidote for the Educational Trust doses is the announcement in several New York papers, notable the *Tribune*:

No gifts from this great fund are intended to be given to State educational institutions. While certain colleges will be selected for contributions or endowments, forming a chain of educational institutions across the continent, others not so favored will be left to their fate by the Rockefeller Fund, and many of them, it is expected, will be forced to close their doors in the face of such strong support to their fortunate rivals.

So much for State colleges and universities in direct competition with the Educational Trust's "System." But is not the strength of State institutions to be quietly sapped from another direction? Four years ago in an authoritative exposition of the Ogden Movement the claim was made with special reference to its Conference for Education in the South:

As soon as the conference became definitely interested in universal education through the public school it found at its disposal a vast complex of forces waiting to be organized and directed. So enthusiastic, indeed, has been the response to the influences of the conference that it may be said to have at its ready command the whole machinery of the public school system in the South.

With that should be read the statement of the *New York Sun* in 1907 credited to Mr. Frederick T. Gates, who had just succeeded Mr. Ogden as chairman of the General Education Board:

The work of spreading the study and application of agricultural improvements in three or four of the Southern States which the Board began when the first \$1,000,000 was received from Mr. Rockefeller, said Mr. Gates, can now be enlarged so that information about better farming methods can be spread throughout the entire South. Only the interest of the first \$1,000,000 could be devoted to this agricultural work because of the "higher education" clause in the second or \$10,000,000 donation. Where the work has been carried on the improvements in farming have been so marked that Mr. Gates says that Southern bankers will not lend money now to men who do not follow the methods taught by the Board's instructors.

The claim of control of the public school system of the South through the Conference for Education in the South and of control of Southern farmers through bankers backing up agents of the Educational Trust must be taken not so much as accepted facts of very large proportions as unwitting revelations of aims involved in the plan of "democratization of education" in the South. When Dr. Edwin A. Alderman, a fervent advocate of the Ogden Movement, and now one of the two or three Southern-born members of the General Education Board, was elected president of the University of Virginia, now looking both to one Carnegie Fund and one Rockefeller Fund for money, in spite of its being a typical State institution, the *New York Tribune*, usually quite close to the sources of correct information, said:

To the public in general the chief significance of this selection is that it links the University of Virginia, with all its traditions and its powerful influence on Southern thought, with the movement for the democratization of education.

Not entirely disconnected from that movement is the more recent effort to place in another State institution, an agricultural and mechanical college, perhaps

as part of the Educational Trust's dickering with Southern farmers, another fervent advocate of the Ogden Movement who has received the endorsement of Dr. Lyman Abbott, editor of the *Outlook* of New York. And the *Outlook* says:

With this financial power in its control, the General Education Board is in a position to do what no other body in this country can, at present, even attempt. It can determine largely what institutions shall grow, and in some measure what shall stand still or decay. . . . Its power will be enormous; it seems as if it might be able really to determine the character of American education.

For an indication of one of the purposes of the "democratization of education" no better authority can be had than Dr. Walter H. Page, a "Southern-born American," also a member of the General Education Board and one of the most violent supporters of the Ogden Movement. Not many years ago in promotion of that Movement was published in his *World's Work* a roast of the South, in which the following occurred:

Military force, or fear of it, and nothing less, put the negro in the South for a time in full possession of the ballot. And nothing else can do it again, under present conditions. . . . The South can be punished politically by reducing its representation in Congress, but its conduct cannot be changed by punishment. The ailment is too deep-seated for mere political treatment. These States have never been real democracies. . . . The problem is to make a democracy there.

To Dr. Alderman also one must go for an exposition of one of the means toward this "democratization," federal aid to education in the South, one of the favorite projects in the Ogden Movement. He said in 1904:

I do not mean that this plan should be confined to the negro alone. The government should see to the education of all the illiterates by a compulsory law. Nor should the government do it alone. Congress should pass a bill appropriating money to different States in proportion to their illiterate population, the State to contribute a certain share of the amount. This would, I believe, be better than the historic Blair bill, though retaining the same central idea.

The logical effect of such a measure has been kindly sketched by Mr. Charles A. Gardiner of New York, who would—

Endow the [National] Bureau of Education with supervisory powers . . . so that it can make education compulsory, fix the courses of study and direct instruction into any channel—Industrial, intellectual, moral or religious—that the citizenship of any locality may particularly require.

That would give the National Government almost as much power to determine the character of American education as that which Dr. Lyman Abbott believes the General Education Board may develop. But when it is known that this Educational Trust is already co-operating with at least one department of the National Government in the educational campaign, that this or that former employe or agent of the Ogden Movement has been placed in a State institution of learning and in one case at the head of the State educational system, it is time for men who believe reliance may be had upon the State educational system to bestir themselves against the menace.

They should not be diverted from their task by secondary considerations, such as the sources, individual or sectional, of the millions employed in the undertaking, or the personality of this or that individual or institution standing for the Movement without really perceiving its certain ends.

They should concern themselves with the methods employed, no matter how plausible or carefully veiled they may be, such as the co-operative agricultural demonstrations, branch agricultural schools, the attempts to corral variant colleges in a "university" scheme; the quiet moves through Congress for a revival of the Blairism under another name and the subsidizing of men and colleges. They should keep their eyes upon the main

point, that a close corporation, with unlimited money at its command and under no responsibility to the people of the country, is trying, by bold assault or by adroit manipulation, to build up a "System" which one of its closest allies says "can determine largely what institutions shall grow, and in some measure what shall stand still or decay," and "might be able really to determine the character of American education."

MEN WANTED—WANTED OPPORTUNITIES

[Written for the Manufacturers' Record.]

In the MANUFACTURERS' RECORD of February 28 was published a letter from a manufacturing company in the South setting forth certain difficulties in the way of securing right men for right places. The letter was published for the purpose of eliciting views of the subject from different standpoints. Expression of them has begun. Mr. Edward F. Barrows of Savannah, Ga., writes:

"Noting your editorial 'Wanted: Men Who Can Do Things.' While we concur in many of your views regarding the waste of time and opportunities by many men in the South, yet we would ask you for a little space in which to present another view of this particular case.

"Does the party writing that letter realize that any man who is so thoroughly competent and who has the available capital of \$5000 to \$10,000 would not probably be seeking employment under a salary as superintendent?

"He says that the man wanted must have made a success of this kind of business, and acknowledges that he himself is not competent to manage it. Yet he expects to find a man who has more ability and perhaps an equal amount of capital willing to accept his position as superintendent.

"His statement that he advertised and received many answers, from which he picked out the best and was badly burned, would suggest that his judgment in selecting was on a par with his ability to manage the business, as he acknowledges he is incapable of doing. Now, in selecting those answers, did he consider only such as claimed to be expert in his particular line of business, and who, by their representations, showed superior qualifications by reason of age, former employment or numerous recommendations?

"Perhaps among those answering there may have been the very man to meet the requirements, but who, being too honest to misrepresent, whose letter-writing ability being poor, or who by reason of his age was not picked out, and as a consequence both parties were disappointed.

"Opportunity oftentimes passes by the party because that party is not in position to grasp and hold it. There are many men in the South today who would be glad of a chance to show by their intelligent, industrious effort their capability of holding such a position as the one here represented. It may be that such an one answered the advertisement, but was not picked out as best. Perhaps his answer was too honest and he did not claim to be expert in the particular line named. Your correspondent asserts that he is afraid to advertise again because of his experience. Would he expect that the manager whom he so desires would give up because some little thing about the business did not move smoothly. The manager, to be a success, must overcome such difficulties, and if he did not succeed the first time would try again and again until he accomplished the desired results. Perhaps the opportunity may have been offered some man in this case, and he tried to grasp it, but because he was one of many, and it was not

allowed him to decide that he should have the chance to make an effort for this particular position, he cannot be blamed for not taking this.

"Your correspondent also says: 'The man whose competency can be proven will be given full control.' Now, does this not indicate that heretofore the party in the position has not had control, and was therefore under the management of others, who, if it was the writer, acknowledges his own incapacity? It is no wonder that he wants to find a man who has made a success of a similar business. But he should be more generous. He should at least be willing to acknowledge that many tried to obtain the position—who were offered no chance—and that it was not entirely their fault that they did not grasp and hold the opportunity and prove their competency.

"Let him advertise again. The history of the world shows that whenever the events of mankind needed a manager or leader one has been raised up to fill the requirement, and we have no doubt that if he will look in the right place he will find what he is looking after, and in his case I do not think he will find a better than through an advertisement in the MANUFACTURERS' RECORD."

A gentleman whose address is Lock Box 956, Tampa, Fla., writes:

"I have just read your comment on and the extract from the North Carolina man's letter, headed 'Wanted: Men Who Can Do Things.' In answering this letter and your comment, which I think indeed very sound, I am at the same time putting myself before the public as an applicant for a position, not because I have not got one, but because I want a better one which I am able to fill. I have spent 25 years in the business of construction, buildings, bridges, etc.; am a thorough mechanic and practical in every way. For in the absence of a technical education I have had to get it by experience, and have paid very dearly for it.

"I want a position as superintendent of some manufacturing plant or construction work that is permanent. I, of course, would not undertake to manage a business which I knew absolutely nothing about, but there are many places to be filled that come along in my line the success of which depends on the ability of the man in charge to properly organize his forces and get results. The manipulation of labor successfully is today the all-important issue, and the man who can successfully do this is the man. I have endeavored for 15 years, all of which time I have been foreman or superintendent, to study labor situations and conditions, and am quite proud of my reputation as a manager. I am 44 years old, sober and in perfect health, and believe I can make some concern a good superintendent."

Paper from Cotton Stalks.

The results of chemical tests made by Alfred Komp, its chemist, on some samples of cotton-stalk paper and pulp and recently published in the *Paper Trade Journal* of New York indicate the possi-

bilities of future developments along this line. The samples were made by W. H. Croll of Atlanta, Ga., an inventor of an improved paper stock and paper from cotton stalks. Mr. Komp stated that his examination showed the following appearances and peculiarities:

"The fibers between or around the small woody fiber string pieces present in part whitish shades, and some are of a brownish tinge; they are nearly free from lignin or pectin impurities, are very long and slender, and, although not perfectly clean, they show a remarkable similarity to the fiber in the cotton boll, from which they seem to differ substantially only in their more slender, flattened and thus more pelucid appearance.

"The fibers are more regularly shaped, longer and finer than those found in chemical wood pulp, and their elastic structure makes them apparently quite suitable for fine grades of paper. The best wood fibers are less valuable, being more clumsy and less wily; straw fibers are weaker, and much shorter, otherwise similar in shade and suppleness.

"It seems likely that the separation of the fibers from partly combined foreign substances would depend in a lesser degree upon the required chemical process than upon modern mechanical contrivances.

"The economical question could be properly and satisfactorily settled by trials on a large scale for the purpose of ascertaining the producible percentage of fiber stuff in the stalks.

"In the microscopical picture the fibers resemble in their outlines the cotton-boll fiber to some extent; they are flatter, finer and more translucent; they are marked with fine parallel lines, but they lack the striated form whereby the cotton-boll fiber is so remarkably distinguishable, although in a few specimens there appears a slight indication resembling the central canal in the original fiber, but the peculiar twisting of the latter does not appear in the new supplement.

"On a first review of the cotton-stalk fiber the resemblance to chemical wood fibers, cellulose or sulphite and soda pulp is almost confusing. The first is similar in width and general shape, though much longer and generally finer, but on account of an irregular appearance on some of the cotton-stalk fibers of various, now and then observable, very fine, small 'bordered pits,' also called 'pitted courts,' one could be easily tempted to suspect a wood cellulose fiber.

"Those mentioned pits, observable in the microscopical picture, appear in short rows regularly distanced on either the right or left side of the fiber.

"Still another surprising appearance presents itself in the chemical examination of the cotton-stalk fiber, and in this I have discovered the fact that the ground wood-pulp fiber is not the only one (as it has been taken for granted by paper specialists) that will produce a chemical reaction under the influence of a drop of phloroglucin solution on the sheet of fiber, in the gradual appearance of a red coloration. This manner of testing sheets for determining their contents of ground wood fibers has been practiced for more than 20 years. Fragments or string pieces of the cotton stalk, dampened with said phloroglucin preparation, will show a deep red or reddish-brown color. Some of the sheets that do not appear to have been made from bleached pulp show the same bright tint; others show it in a lesser degree.

"In regard to suggestions of a doubt of the possible presence of 'some' ground wood pulp, it can be said that these are refuted by the fact that woody parts of the cotton stalk could not unwittingly be substituted for needlewood strings. The

described reaction on the stalk fiber, unless well known, would easily mislead the examining chemist into an erroneous but possibly very harmful supposition or conviction.

"It has been published and taught by a multitude of handbooks that ground wood pulp is the only paper substance that can be discovered in a sheet of paper by the application of the well-known phloroglucin reagent. However, this so far useful theory must hereafter be abandoned with the appearance of the new cotton-stalk fiber on the market. The paper testing institutions or bureaus are herewith invited to take due notice of this discovery."

Gulfport's Progress.

[Special Cor. Manufacturers' Record.]
Gulfport, Miss., March 2.

The Progressive Business League has elected as officers for the ensuing year Messrs. Geo. M. Foote, president; J. L. Taylor, vice-president; S. C. Gardner, secretary, and H. A. Jackson, treasurer. Hon. J. H. Neville, the retiring president, reviewed at the annual meeting the work of the league for the past year, demonstrating the great necessity and value of the league. He complimented the work of the secretary in compiling valuable data showing the development of Gulfport since its incorporation. The total commercial business of Gulfport for 1906 was \$29,000,000. As a matter of interest he showed figures to the effect that the wholesale grocery business was \$4,000,000 in round numbers. This is not included in the export and import value of \$29,000,000 shown above. A prosperous year is predicted for the league in 1907.

With the completion this year of the Gulfport & Northwestern Railway and the building of the Gulfport & West Point Railway, for which charter has been applied, work to commence at once and the line rushed to completion, paving of the streets with vitrified brick, completion of the sewer system, development of the oil field, which is in the corporate limits of the city, enlargement of the wharf facilities and extension of the basin and channel, great things are expected for Gulfport.

Nashville's New Shoe Factory.

Manufacturing interests at Nashville, Tenn., were augmented last week in the completion of the new shoe factory of the Richardson Brothers Shoe Co. This plant has been under construction for some time. It comprises a three-story and basement building equipped with modern machinery driven by electricity for the manufacture of shoes that retail at from \$2.50 to \$6 per pair. When the entire equipment is in operation the factory will employ from 300 to 400 operatives, of whom about 200 will be skilled. It is stated that the company's first order calls for the delivery of 87,000 pairs of shoes, thus ensuring taking the output for nearly the first six months of operation. Mr. J. B. Richardson is president, W. Evans Richardson is general manager, and George H. Drew, an experienced shoe manufacturer from New England, is superintendent.

Bluefield.

Among a mass of facts presented by the *Daily Telegraph* of Bluefield, W. Va., indicating the healthy growth of that city are some showing what the Norfolk & Western Railway is doing there. There are already 33 miles of track in Bluefield completed and 27 miles under construction. Fourteen passenger trains pass through the city daily, and an average of 1208 freight cars daily. An average of more than \$12,000 a day is paid at Bluefield to 4457 employees of the Norfolk & Western in transportation, maintenance of way and stocks.

OZARK REGION OF MISSOURI.

[Special Correspondence Manufacturers' Record.]

St. Louis, Mo., March 2.

Missouri, by reason of her natural resources, their vast volume and great diversity, is entitled to practically first place among all the Commonwealths of the Union, but unfortunately her people for many years permitted her light to be hid under a bushel, and it is only within the past few decades that she has begun to forge to the front. The State is an empire, with every resource within herself to render her entirely independent; in other words, she could be cut off from every other State, or, for that matter, from every other country, and yet her people live, prosper and grow fat without ever experiencing a want that could not be practically supplied from her own resources.

One section, the Ozark region, comprises a great part of Missouri south of the Missouri river, and while commonly classed as mountains, no one traversing them by any of the several railways crossing the same would ever suspect that he was tackling a range of mountains, the uplift being so gradual and uniform. The whole expanse of the so-called mountains is simply and in reality an elevated plateau skirted by hills which have not the sterile characteristics of mountains. There are no towering peaks, and the surface is not covered with immense boulders, the higher lands simply being overspread with small rocky fragments or gravel, mixed with a productive soil especially adapted to the growing of fruits and grasses, particularly the true blue varieties. There are occasional outcroppings of solid stone, but it is seldom that a tract of land is found that more or less of it is not susceptible to cultivation.

The Ozark range, or region, extends nearly diagonally across the south half of Missouri, starting almost immediately at St. Louis, to the southwest corner of the State, lapping over into Arkansas and taking in corners of Kansas and the Indian Territory. Within this range will be found the great mineral deposits, from which millions of dollars' worth of iron, coal, lead and zinc are annually taken from the ground.

In the Ozarks is now produced the finest fruit in the world, consisting of apples, peaches, pears, plums, berries of all kinds, etc., and the belt is so extensive that its possibilities would seem to be limitless. In addition to fruits, corn, oats, wheat, grass, hay and vegetables are grown, all of superlative quality and in superabundant quantity. The whole sections is bountifully supplied with living springs, brooks and rapid-flowing, limpid rivers. Perhaps no equal area of the earth's surface is more highly blessed with pure, healthful water than is this, and yet, notwithstanding all these advantages, there are thousands upon thousands of acres of virgin land only awaiting the magic touch of the husbandman to be transformed into the abiding-places for thousands of prosperous, happy and contented people. These lands can be had from private holders at a price so reasonable that the man of moderate means can secure enough to always render it a genuine pleasure to welcome a visit from the stork.

The uplands are almost invariably covered with heavy growths of timber, mostly oak, and much of this is valuable for merchantable purposes. Railway ties by the thousand are furnished from these forests, while the charcoal industry is heavily conducted in several of the counties, especially in Dent and Crawford, in the vicinity of Sligo, where one of the great blast furnaces of the country is located. The iron to feed this great plant is mainly mined in the Ozark mountains, much of it being brought

from the mines over the company's own railways, though considerable ore is shipped in from other States for the purpose of tempering the Missouri article. "Sligo charcoal pig" has a reputation world-wide, and stands the test under every condition. The valleys in the Ozarks are generally clear, and in proportion to their extent offer unexcelled opportunities for agriculture. The crops are always considered sure, and they can be diversified in wide variety. Improved lands in these valleys demand a good price, but none of them are high in comparison with first-class agricultural lands in other States. In the highlands are also found many finely-developed farms, and these, when any of them are for sale, command good prices. In the region, however, there are yet thousands of acres that can be had from private parties at nominal prices on reasonable terms, out of which farms can be carved in an exceptionally short time. The writer has explored the Ozark regions pretty thoroughly, crossed and criss-crossed them, and without hesitation expresses the opinion that they offer more favorable opportunity for the poor man to secure a home than does any other section of the United States. It is true that a method of agriculture differing from that followed in a prairie country is necessary, and, of course, the use of modern machinery is restricted, but to the man who is industrious, intelligent and resourceful there are boundless possibilities in the Ozark farm. The man may not be able to cultivate as much land, but by adapting what he does cultivate to the purposes for which it is best suited the profit derived from the smaller tract is likely to be greater than he could gain from the larger one. In the growth and production of apples, peaches, plums, grapes, cherries, etc., the Ozarks stand unrivalled, and in all sections of the country her output always commands a ready market and the highest prices. Ten acres of well-selected land in these hills properly planted to fruit will support an average family, while 50 acres will insure a competence. The whole country is so thoroughly adapted to the egg, poultry, dairy and berry business, with markets so convenient that no industrious sensible man need be afraid that he cannot make ends meet during the time he is clearing his wild land and getting ready for setting out an orchard and to plant his crops. A vegetable plot, a few rods for strawberries, for which there is always a market, reinforced by the egg, poultry and dairy business, and you have the basis for a living, and with patience, perseverance and intelligent industry in the shortest possible time the family will have a home that will prove a joy and a comfort. It is a country that grows in favor, and it is seldom that you hear of an "Ozarker" moving out with a view of bettering his condition.

In his travels throughout the Ozarks, even outside of the cities, the writer found many almost palatial homes, where affluence told the story of successful efforts, but in no instance did he find a home where the wolf was in even howling distance of the door. The house may have been of primitive construction and the furnishings limited, but always there was plenty, and of the best, to eat, together with hopeful, contented and happy heads of the family and a brood of glorious, healthy and helpful children. In this connection, too, it is generally understood that there is hardly an acre embraced in the Ozark range of mountains that cannot be utilized for some profitable purpose; for instance, the most inaccessible points are peculiarly adapted to sheep-raising, while in other sections unfit for cultivation

cattle-grazing is highly profitable.

The Ozarks not only offer rare opportunities for homes for the poor, but for the establishment of innumerable industries of greater or less importance. Already there are several water-power plants in the different sections of the mountains, together with numerous other sites, that sooner or later will be utilized. Some day this widespread and immense natural power will be harnessed and made to do duty in the interest of the "Ozarker."

Throughout the Ozark regions first-class public schools are found, all of them being taught full terms. In addition to these the School of Mines, a branch of the Missouri State University, is located at Rolla, and this is peculiarly apropos, for the very simple reason that the whole range abounds in minerals, among them gold, silver and copper having been uncovered. The home-seeker, however, who goes to the Ozarks will do well to waste no time hunting for either of the metals named. The lead and zinc belts are specifically marked, and outside of them not much of value will possibly ever be found. If, however, luck should come his way and a mine fall to his lot, even of the baser metal of the three, he will have that much additional with which to felicitate himself for coming to the most beautiful and interesting section of Missouri.

All the smaller rivers are regularly stocked by the United States Fish Commission, and as a consequence the fishing throughout the section is excellent. The various species of black bass, croppie, perch and sunfish are found in the stream; several species of pike and trout inhabit the rushing waters of the Ozarks, while buffalo, suckers and catfish, the latter varying in size from one to fifty pounds or more, are abundant in the more sluggish streams. In the forests all the small varieties of game, including wild turkeys, are found in abundance, while foxes, coons, 'possums and mink are still plentiful in the back region of the mountains, and deer are frequently encountered.

Within the Ozark range are many beautiful and prosperous cities, among the more important being Sullivan, Newberg, Cuba, Salem, Sligo, Rolla, Lebanon, Marshfield, Springfield, Aurora, Pierce City, Monett, Greenfield, Joplin, Carthage and Neosho. In either one of these places the man who has money to invest, either in real estate or business, cannot go astray. F. M. P.

THE BIRMINGHAM MARKET.

Prices for Iron Well Maintained the Past Week.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., March 4.

The iron market showed its teeth the past week, and prices were well maintained. Some holders advanced prices from minimum values to the maximum figures and made sales. There was some attempt to squeeze values, but it was unsuccessful, as new buyers kept coming in and taking offerings at asking prices. It leaked out at the close of the week that a sale of basic iron had been made several weeks ago covering 33,000 tons, 18,000 of which was to a western point and 1500 to an eastern point, at \$19 for delivery last half the year. Part of this lot was sold during the holidays and part around February 1. It was never given publication here until now. Adding this amount to the other sales reported the past week, and we have a grand total of over 100,000 tons of iron that found buyers the past week. It is no misrepresentation to say that the buyers were representatives of all classes of iron interests.

There were cases of sales of forward delivery iron, in which, before the ink on the contract was dry, the buyer would beg to exchange it for quick delivery iron. The

actual sales are conservatively estimated at 75,000 tons, and they could easily have been 100,000 tons had sellers deemed it prudent to take the bride off the market and accept what came. It must not be forgotten that two of our leading interests have sold for forward delivery to October all that prudence will permit. They have some for last quarter delivery that is yet available. We have another interest that strictly limits its sales as to delivery to the quarter following current quarter. On long deliveries they are "shy." And it must be remembered that none of our furnaces are averaging maximum output, and all of them are not in blast.

We ought to be turning out approximately 150,000 tons per month. All furnace men know this, and it behooves them to be conservative in anticipating furnace output the remainder of the year. He would be a reckless manager who ignored a conservative estimate of capability now.

Spot iron, or for nearby delivery, can be had in limited amount at \$22.50. Not all the interests have it. There is another class of spot iron that the writer has dubbed "emergency iron," for which a premium is paid for quick loading and transit. The buyers of it are in urgent need of it, and it sells at \$23, \$23.50 and \$24. The orders are for small amounts. No. 2 foundry and No. 2 soft sold at \$24, and No. 1 foundry sold at \$24.50. Some gray forge sold at \$19. One can readily see how difficult it is to quote a certain value for cash iron.

For the second quarter a limited amount can be had on a No. 2 foundry basis at \$21, provided it is a mixed order, with other grades bringing full values. But the preponderance of the sales for this delivery are on the basis of \$21.50 for No. 2 foundry. The third quarter usually brings a premium over the last quarter delivery. For No. 4 foundry \$17.25 was refused for 600 tons, and for the fourth quarter \$18 was accepted for gray forge. Most of the sales made were for last half the year. There were eight sellers. One can tell if he is familiar with the market approximately the deliveries, for he is in touch with ability to deliver. So it can be said that the sales made during the past week were very limited as to nearby delivery and rather free as to long delivery. The aggregate was approximately 75,000 tons. A local buyer took 15,000 tons. Pipe interests were good buyers. The sales by the various interests varied in totals from 3000 to 15,000 tons. The price obtained in some cases was on basis of \$18.50, while it was \$19 in other cases. The total sales indicate the activity of the market. As it is generally understood that there are important interests whose requirements for the second quarter are not yet covered, it need be no surprise if it happens that they enter the market as large buyers. It is generally anticipated, and it is the belief that this market will find it very difficult to meet their demands with any satisfaction to them.

The Southern Steel Co., which has heretofore held aloof from general selling, is credited with taking an active part in selling, while the Sloss and Republic companies not only don't care for any business this side of October delivery, but they are turning it down. We have a strong intimation that the Talladega furnace will again go into commission. But this won't offset the seven now out. As they come in others will go out, so there is very blue prospect for maximum output in 1907.

Some charcoal iron sold at \$23.50. As fast as offered it is absorbed.

An element that will probably influence prices, at least temporarily, in the near future is the car situation. It gives pleasure to state that railroad officials have taken hold of things in a way to create the

impression that they mean to do something toward alleviating the situation. In this they will have the co-operation of all the shippers. It will be both a pleasure and a duty to report a tangible improvement in the car situation.

The respite in freight rates that expired yesterday has been extended to April 1. The movement of cars during February made scarce an impression in decreasing the iron in furnace yards. An extension of the time on the part of the railroads was good policy and also an act of justice.

Weller & Co. report inactivity in the scrap market, with some radical changes here noted:

Old iron rails are \$23 to \$23.50.
Old iron axles are \$24 to \$25.
Old steel axles, \$17 to \$18.
Old car wheels, \$20.50 to \$21.50.
No. 1 railroad wrought, \$20.
No. 2 railroad wrought, \$16 to \$17.
No. 1 country wrought, \$16.50.
No. 2 country wrought, \$14.50 to \$15.
Machine castings, \$15.50.
Stove plate, \$12.
Cut boilers, \$13.
No. 1 steel, \$14.50.

One large interest has of late received shipments aggregating 127 cars.

Cast-iron pipe we give at approximate quotations. Business at these industries is still very active, and a good portion of it can be classed in the list of emergency orders, with a possible premium for special service.

Four and six-inch pipe are \$35.
Eight, 10 and 12-inch pipe are \$33.
Large sizes are \$31.
Extras are 3½ cents per pound.

The various industries report full order lists, with new specifications coming in as the old are completed. There is some talk of tight money, and a few have learned that money can't be had just for the asking. But the deposits at the banks show no diminution, and that is an unfailing guide as to actual conditions. We must look to the course of the drastic tendency and radical action of the Legislature in dealing with the public utility class of corporations that are under surveillance or on trial before it. Confidence always leads the vanguard of prosperity. When it takes flight money feels the blight and goes into a retreat until confidence again resumes its way.

The Crescent Land Co., capitalized at \$25,000, was incorporated the past week with J. C. Dabney as president, W. B. Fowlkes as vice-president, G. M. Bowers as treasurer and F. B. Berry as secretary.

The Blue Lake Land Co. was also incorporated, with a capital of \$20,000. J. J. Pearson is president, Thomas Pearson vice-president and Laura Pearson secretary-treasurer. There were also some incorporations entered of small dimensions.

J. M. K.

BUILDING AT MEMPHIS.

Planning for a \$3,000,000 Union Railroad Depot.

[Special Cor. Manufacturers' Record.]
Memphis, Tenn., March 4.

The demand for lumber is causing shipments out to be of much greater volume than the receipts from inbound shipments and work at the numerous mills in the city can aggregate. The price of cottonwood lumber shows some advances, and prices on oak, poplar, cypress, gum and ash, all of which find ready sale, are firmly held. The box and fruit-package concerns are utilizing all the cottonwood that they can get. Here in the Memphis district weather conditions have been a good deal improved the last 30 days, and the mills have been doing good work. The retail demand in the city has picked up considerably the last fortnight, and building work promises to be quite extensive during the

next 60 or 90 days. The cooperage market is very stiff on tight barrel stave products, and slack cooperage lines remain about as they have been for the last 60 days, bringing satisfactory prices to the manufacturers. There is still some trouble in getting cars just when needed, but the situation is showing improvement in this regard. The export trade is brisk on lumber, particularly on oak and poplar, but much complaint is uttered on the matter of high ocean rates, and with the export stave interests there is reputed to be extreme difficulty in getting cars to start the product to the various ports.

The new union depot for Memphis has taken a definite step of advancement the last few days, and it seems assured that the work will be started this year. The charter of the Memphis Railroad Terminal Co. has been forwarded to the secretary of State. The list of incorporators who will form the first board of directors includes A. W. Sullivan, general manager of the Iron Mountain Railroad; S. T. Fulton, assistant to President B. L. Winchell, representing the Chicago, Rock Island & Pacific; C. R. Gray, vice-president of the St. Louis & San Francisco; F. H. Britton, vice-president of the St. Louis Southwestern; J. L. Lancaster, vice-president of the Union Railway Co. of Memphis; Wm. S. King, general superintendent of the Yazoo & Mississippi Valley Railroad; W. J. Harahan of the Illinois Central, G. E. Evans of the Louisville & Nashville, G. H. Ackert of the Southern, J. W. Thomas, Jr., of the Nashville, Chattanooga & St. Louis Railroad, and John H. Watkins, vice-president of the Bank of Commerce & Trust Co. of Memphis. In the distribution of the stock among the 10 constituent companies, 99 shares will be allotted to each corporation, with one share to the individual representative of each road, thus qualifying such representative to a seat in the directorate. The new depot will be erected at Davis avenue and La-Rose street, with elevated tracks over Main street. The station will probably cost about \$3,000,000 and the terminals \$2,000,000 more, making a total expenditure of about \$5,000,000.

Work is progressing on the million-dollar courthouse being erected in Memphis for Shelby county. John Pierce & Co. of New York are the contractors.

Tonight the water commission will award the contract for the construction of the new auxiliary plant and decide upon its location. There have been 10 bids put in. They indicate that the complete cost of the structure will be about \$100,000. The successful bidder will be compelled to have it ready for use by July 1. The present capacity of the wells in North Memphis and new South Memphis is about 21,000,000 gallons daily, and the new plant will carry this to 26,000,000 gallons.

In the month recently closed a gain of \$178,395 was shown in the valuation of permits over February of last year. During March a permit will be taken out for a large addition to the Peabody Hotel, now run by the Memphis Hotel Co.; also probably for an addition to the Alcazar Flats.

Contractor F. B. Young will shortly begin the erection of a cider and vinegar factory at Gholson and Kentucky streets for W. L. Burgie. This will cost about \$5300.

Benedict, Warren & Davidson have begun work on a five-story warehouse for the implement and hardware business. It will be located on East Calhoun avenue near Main street. The building will cost about \$45,000.

The new veneer plant of C. L. Willey of Chicago being erected in Memphis as a Southern branch of his business is nearing completion. It will have a capacity of about 50,000 feet per day.

FORT WORTH'S FUTURE.

Achievements Full of Promise of Greater Progress.

[Special Cor. Manufacturers' Record.]
Fort Worth, Texas, March 2.

Situated almost in the geographical center of one of the most fertile and productive areas in the world, with a princely domain of undeveloped territory to the west, northwest and southwest, lies the beautiful and buxom city of Fort Worth, the cattle and grain center of the great Southwest, a veritable metropolis of progress, industry and commercial wealth. Its growth has been phenomenal, steady and substantial. There are over 127 industries, large and small, in the city, making some articles of utility and giving steady employment to labor. Thirty-seven of these (including the railways), employing 60 or more persons each, have on their pay-rolls 8000 persons and expending in wages nearly \$6,000,000 annually. Including every enterprise, the number would reach in the neighborhood of 9000 and the pay-roll \$8,000,000. One may here note the secret of Fort Worth's growth.

Another great lever in the progress of this city is in the magnificent transportation facilities. There are 11 trunk lines of railway converging at Fort Worth. They are Texas and Pacific Railway, Missouri, Kansas & Texas Railway, Gulf, Colorado & Santa Fe Railway, Houston & Texas Central Railway, Fort Worth & Rio Grande Railway, Transcontinental branch Texas & Pacific Railway, Fort Worth & Denver City Railway, Chicago, Rock Island & Gulf Railway, St. Louis Southwestern Railway, St. Louis & San Francisco Railway, International & Great Northern Railway and the Trinity & Brazos Valley Railway.

These roads furnish 17 outlets for the trade of Fort Worth. It is stated that there are more miles of railway, sidings and switches in the railway yards in Fort Worth than in any city in the South. In 1905 the railways of the city handled 638,078 freight cars. In 1906 the number reached the remarkable total of 855,491 cars, an increase of 217,413 cars. This will probably be difficult for any city of the size of Fort Worth to excel. Another strong vertebra in the backbone of the growth of Fort Worth is to be seen in her banking facilities. She has seven national banks and two trust companies, and there are two national banks in the progressive and flourishing suburb of North Fort Worth. These institutions have an aggregate capital and surplus of \$4,220,000 and deposits amounting to over \$17,000,000. There is no better or more certain evidence of the volume of business transacted than the bank clearings, which aggregated for the year 1906 the sum of \$317,393,685, an increase over the year preceding of \$51,887,503.

The packing-houses and stockyards of Fort Worth are among the largest contributors to the city's business and prosperity. The plants of Armour & Co. and Swift & Co. are models of their kind. Each of these plants cover an area of 21 acres, and the stockyards, pens, sheds and horse barns fully 100 acres more. They represent an aggregate investment of over \$6,000,000.

There are many evidences on every hand of the steady growth of this Texan metropolis. It is the recognized center for many of the leading industries of the State, besides being the only city in the State that has shown a continuous doubling of the bank clearances for the past two years.

It is the cattle center, handling 95 per cent. of the live-stock of Texas; the stockyard center and the packing-house center. It has more banks than any city in Texas, more miles of street-car (all electric) lines than any city in the State. It is the recog-

nized grain center, handling more grain than any other five cities in the State. In fact, Fort Worth is fast forging ahead in all the channels of productive wealth. It has a large and fertile farming district, where the farmers are prosperous from diversified farming. All kinds of livestock do well in North Texas; the land is rich and productive, while the climate is mild and healthful.

Fort Worth's two principal business streets are paved with vitrified brick and asphalt. The residence streets are graded and macadamized.

There are 43 church buildings in Fort Worth, representing every denomination. For a wholesome and pure supply of water Fort Worth is especially blessed. An unlimited supply of pure artesian water coming from an average depth of 1000 feet is supplied to the city; hence the health of the city is phenomenal, very little sickness being reported.

The Texas Real Estate Development Co., 1016 Houston street, is offering the homeseeker and manufacturer splendid opportunities for investments. To enterprising manufacturers desiring to locate near Fort Worth free sites from 2 to 10 acres will be given outright. A cotton manufactory, knitting or yarn mills is especially desired. Here is a chance for the establishment of factories, with special inducements offered, with homes provided for employes and immediately on railroad track, with facilities for transportation.

The Acetylene Light & Heat Co., C. W. Watson, secretary and manager, 1608 Houston street, has located in this city, having been compelled to move from Denton, Texas, to Fort Worth on account of the large increase in business. Its new acetylene light is finding recognition in all the large residences and hotels throughout the State, and is deservedly popular everywhere.

The Fort Worth Board of Trade is one of the potential factors in the city's growth. It keeps alive to the exigencies of the hour, and nothing is left undone by this trade organization looking to the furtherance of the city's interest in every line of industry. Its motto is "All roads lead to Fort Worth," and one would think so from the hum of industry to be seen all over the city, from center to circumference.

The Factory Club, A. N. Evans, secretary, is another positive force for the up-building of the city. This organization is the only one in the State. It is an organization of business men looking to the development of home industries and manufacturing. This organization has added many useful enterprises and industries to the city since its organization. Secretary Evans is a well-posted man regarding Fort Worth's needs and necessities, and is a worker in all the channels by which the city of Fort Worth may reach that goal in the manufacturing supremacy which must sooner or later develop into larger and more extensive proportions. Taking it all in all, the environments, possibilities, advantages and resources of Fort Worth give the future of this blythe, beautiful, buxom metropolis a rosy hue of possibilities not even at this time fully appreciated and comprehended by those who have already been the positive factors in the making of a city challenging the admiration of every stranger admitted within its hospitable gates. ALEXANDER HELPER.

Looking for Industrial Location.

The MANUFACTURERS' RECORD is advised by George T. Parker of Kelford, N. C., that he is seeking a location for a small carriage factory and a general blacksmithy. He prefers to locate in North Carolina or Virginia, but nevertheless is prepared to consider any locality which has the requisite advantages for the industries named.

CURRENT EVENTS AS VIEWED BY OTHERS

SOUND SENSE ABOUT A SOUTHERN "COMMISSION."

[Birmingham News.]

The latest recruit to the ranks of the Southern Governors who have refused to appoint a committee to a proposed conference to discuss the race question in the South is Governor Blanchard of Louisiana. Governor Comer of Alabama also declined to appoint delegates to the proposed conference, as did Governor Ansel of South Carolina, Governor Glenn of North Carolina, Governor Swanson of Virginia and Acting Governor Moore of Arkansas. Doubtless most observant people of the South who know anything about the so-called race question are of the opinion that these Governors acted wisely in taking this means of showing their disapproval of the movement. It appears to have emanated from Atlanta, but has so far made little appeal to the sympathy and judgment of Southern Governors.

Governor Swanson, in declining to appoint the committee suggested from Virginia, gives his reasons, among which was that the creation of such a committee would precipitate a discussion throughout the country that would do more harm than good.

At this time there is comparatively little race friction in the South, and, indeed, much less than in the North. The holding of such a conference as is proposed would do harm, as is the case with most of the agitation of the negro question. There is no need for such a conference, to commence with; no reason for it and no good will result from it. The agitation of this question in the South nearly always precipitates unfavorable criticism from doctrinaires, theorists and self-constituted proprietors of the universe in the North who know little about the South and Southern conditions and nothing practical about the negro. A great many of these people who are honest at heart are pitifully misguided in their views from one reason or another, and would misunderstand many things that would be said about the negro at such a conference.

The best way to deal with the race question is to let it alone. Incessant agitation of the negro question does neither the white man nor the negro any good. We hope that the conference will not be held.

[Nashville American.]

Somebody in Atlanta has called a congress of leading Southern citizens to discuss the negro question. The call has fallen largely on deaf ears, as it should. Governor Glenn of North Carolina, Governor Ansel of South Carolina, Governor Swanson of Virginia, Governor Comer of Alabama and Acting Governor Moore of Arkansas have declined to make any appointments to the proposed congress, and some of these Governors express strong disapproval of the movement. Their judgment is to be commended. There is no need of a race conference. It could accomplish no good. The races are getting on together very well—about as well as could be expected of two races so widely divergent in character. There are difficulties and annoyances, of course. This will always be so. The black race has serious defects, but until the white race is free from loafers and idlers and drunkards and hoodlums and drones and disturbers it can hardly expect a race handicapped as the black race is in more ways than one to be free from objections and undesirable elements.

The intelligent white people are the negroes' best friends. The negroes are doing

very well as a whole. They do most of the drudgery and hard work, where they are numerous, and many of them own their homes and are accumulating property. For those who won't work, for the loafers and idlers who depend for their living on honest folks, black and white, there should be effective vagrancy laws. Idleness breeds mischief in black and white. There should be no mercy for negroes who commit the unspeakable crime; but the great mass of them is free from such offenses. While condemning the criminal element, which is too large, let us not forget the much larger element which is not criminal, and which asks for a chance to labor and better itself.

An excellent thing for the negro is to keep him out of politics and from under the influence of political demagogues and selfish leaders. A political campaign in which the negro is involved is sure to result in more or less race friction and injury to the negro.

It is well that the proposed congress or conference should fail. There is no reason for engaging in discussion and agitating a question without profit and with the effect of aggravating it. When occasion demands action it will not be wanting.

[Savannah News.]

Governor Blanchard of Louisiana has refused to appoint a commission to study the race question, as suggested by the Rev. John E. White of Atlanta. The Rev. Mr. White is a Baptist minister of Atlanta, Ga. A week or so ago he sent to the Governors of all the Southern States a letter in which he suggested that a conference of these States be held for the purpose of formulating a policy as to the future relations of the white and black races in the South, and asked that delegates to such a conference be appointed. When the Governor of Virginia received the letter he made a quite lengthy reply, in which he stated that he saw no reason for such a conference, and that as far as he was informed the races in Virginia were getting along without friction or trouble. The Governor was quite emphatic in expressing the opinion that he saw no good to be derived from such a conference as was proposed. We have no doubt, of course, that the Atlanta Baptist minister was prompted by the best of motives in taking the step he did, and it seems to us that the Governors of Louisiana and Virginia showed great good sense in refusing to have anything to do with such a scheme.

In the first place, there is no probability that a conference made up as proposed could reach an agreement as to the policy that should be pursued by the whites in their relations with the negroes, and if an agreement were reached there would be no assurance that it would be respected. As far as it is possible to see, therefore, a conference of the kind suggested would simply be productive of mischief.

Common sense teaches what should be the policy of the whites in their dealings with the negroes. It is that the negroes should be treated with absolute justice. If that is done the relations of the two races will be as satisfactory in other parts of the South as they appear to be in Virginia. The negro should be protected in all the rights which the law gives him, and he should be encouraged in every possible way to be a good citizen. There is a very considerable percentage of bad and worthless negroes in every community in the South, and there are also some bad and

worthless white men, but because there are such bad and worthless negroes it doesn't follow that all negroes are bad and worthless, or that by the right sort of treatment a big majority of them cannot be made very good citizens.

And there is a probability that if there were not so much talk about what should be the policy as to the future relations of the two races by those who haven't given the subject much thought, and, therefore, are not prepared to express opinions in regard to it, the relations would be even better than they are. If the Rev. Mr. White had been successful in getting the Governors of 11 Southern States to adopt his scheme there would have been a conference, and a vast amount of talk that would have had no other effect, in all probability, than to stir up a feeling that would have made the races even more antagonistic than they are. The Governors acted wisely in putting the stamp of their disapproval upon the conference scheme.

DANCING ON A VOLCANO.

[Mobile Register.]

Even in the richly-endowed colleges of the North politics and education do not get along well together; in fact, they do not get along at all. The college president who would gain the title of adviser in political appointments would at once lose influence in his immediate sphere, and we doubt if even President Eliot, who is credited with close friendship for the President of the United States, would chance offending the governing board of Harvard by suggesting the fitness of any candidate for political office and working as hard for the candidate's appointment as Booker Washington is apparently working for the appointment of Hundley.

In exerting his political influence Washington is injuring the cause of the race he represents in this State and throughout the country. In Alabama there is already a movement, which this paper has not endorsed, to withhold the State encouragement that has been given to the Tuskegee Institute since it was founded, and when Ohio resents the interference of the "third Senator," as Foraker called the colored educator, it is only a short step to loss of popularity among the chief supporters of the colored institute who have largely endowed it. If Washington exerts a political influence in Ohio today, he may do the same in New York tomorrow, and even New York dislikes outside dictation of appointments. If Washington is an unwilling presidential adviser and only gives an opinion when sought for one—his position was explained in this way on a former occasion—the injustice is on the side of the President, who should know that he is placing Booker Washington, in a false position, lessening his usefulness in the field of activity he was formerly solely engaged in and working up an exaggerated idea in the minds of negroes throughout the country that their best educated representative exerts a greater influence in political appointments than Senators and Congressmen.

GERMANY'S PROSPERITY.

[W. C. Dreher in Moody's Magazine.]

The great wave of prosperity that is now felt in all the leading manufacturing and trading countries of the world, duplicates in Germany most of the features seen in America. There is the same general advance in commodity prices, with a corresponding reduction in the price of cheap government and other bonds; the same general advance in the wages of labor, at-

tended by a demand for workmen far beyond the ability of the country to supply; the same heavy movement of goods on the railways of the country, leading to an extraordinary scarcity of cars; the same expansion in the export and import trade; the same activity in financial operations, the biggest turnover in the business of the banks ever known, the largest volume of checks passing through the clearing-houses. Shipping companies are earning more money than ever before from the large commercial movement and the unparalleled emigration, and shipyards are turning out more tonnage than in any previous period of their existence. In the various manufacturing industries of the country there is scarcely a branch that is not working at the fullest capacity and earning more than ever before.

KENTUCKY "NIGHT RIDERS."

[Louisville Courier-Journal.]

Now the so-called "night riders" of Western Kentucky have rolled 21 hogs-heads of somebody else's tobacco into the Cumberland river.

"Night riders" sounds romantic. Criminals would be a less romantic but more apt term.

There is something rotten in Kentucky when these lawless elements are permitted to perpetrate crime after crime against the property rights of various citizens of the State. In the western section their misdeeds constitute a long and revolting chapter. Citizens are sacked and ruined without redress. Criminals raid and devastate without molestation.

Is there local or State government in Kentucky? Is there special provision in the Kentucky code exempting these special criminals from the penalties of the law?

What is law for save to protect the fights of citizens? What is government for except to preserve the peace and enforce justice? Both law and government are made a farce and citizens at large are outraged by the inactivity of those who have been charged with the duty and have taken a sacred oath to administer the government and enforce the law.

FOR ALL CITIES.

[Boston Post.]

Our consul at Berlin reports that billboard advertisers in that city pay 400,000 marks a year for the privilege—nearly \$100,000. And the municipal authorities use the billboards for official notices and exercise censorship of the commercial matter placarded. Here is a suggestion for making Boston busier and better and richer.

EARLY SOUTHERN PIG-IRON.

[Bulletin, American Iron and Steel Association.]

In late years shipments of Southern pig-iron to Northern and Western markets have constituted a leading feature of the home iron trade, but only a little more than 30 years ago these shipments were almost unknown and Southern men were looking to the North for a market for their iron ores. This was in 1872, 1873 and 1874, in which years considerable quantities of iron ore from Tennessee, Alabama and Georgia were shipped to furnaces in Indiana and on the Ohio river. The trade began in 1872, reached its culmination in 1873 and came to an end in 1874. In 1873 George H. Hull of Louisville shipped to the North about 25,000 tons of Alabama brown hematite iron ore mined on the Selma, Rome & Dalton Railroad, and about the same number of tons of red fos-

siliferous iron ore mined near Birmingham. A considerable part of these ores was shipped to Brazil, Knightsville, Terre Haute and Harmony in Indiana, and to Mingo Junction and Steubenville in Ohio. These ores when delivered cost from \$7.75 to \$9.25 per ton, and two tons were required to make one ton of pig-iron, and they would not make Bessemer pig-iron.

WANTED—MEN.

[New York Times.]

Henry Walters, chairman of the Atlantic Coast Line, upon his return from a recent trip of inspection over a portion of the system of which he is the head, told some stories of the way things are going on his railroad, which convinced his friends that many factors other than lack of equipment are contributing to the conditions which have brought forth so many protests of inefficient service by the railroads.

Mr. Walters told of finding at one roundhouse on his road six locomotives with steam up ready to start, though not an engineer was to be seen around any of the locomotives. He asked the foreman of the roundhouse why the locomotives were not starting out on the road, and was informed that the six engineers that were to have taken those engines had reported sick that morning. Somewhat surprised at this, Mr. Walters queried:

"But are they really sick?"

"No," was the reply. "They have all gone to the fair and just reported sick."

"Why, then, don't you discharge them," was Mr. Walters' rejoinder.

"Because," the foreman replied, "I cannot get six other men under the sun to take their places, and these men know it."

If Mr. Walters made any suggestion that would get around the difficulty thus tersely put, his friends did not repeat it as part of the story.

Many other railroad officials besides Mr. Walters have had impressed upon them recently the fact that men trained to handle a locomotive have become extremely difficult to procure. Our great prosperity that has made work for so many additional engineers is the one explanation advanced.

AGITATION AGAINST WEALTH.

[Jasper in *Leite's Weekly*.]

Business men very properly object to anything which destroys what they have been to so much pains and expense to build up. It is only necessary to create widespread distrust in order to destroy the country's prosperity. So far as Wall Street is concerned, distrust, as well as tight money, is driving the public out of the stock market. The railroads are being assailed on all sides, rates are being reduced, while wages and material are being advanced. The vast sums needed for improvements, extensions and equipment are almost impossible to obtain except at ruinous rates of interest, so the order has gone out to curtail, retrench and to reduce expenditures on every hand. What will be the effect of this on the market for labor and materials and the money market itself? The law of supply and demand controls, and in my judgment the action of the railroads marks the climax of the business boom. If so, the liquidation in Wall Street is by no means ended. There may be spurts, occasioned by the efforts of the shorts to cover, but the moving tendency will be downward.

Nor can I pass by without a fitting and well-deserved work of criticism of the much talked of and absolutely insipid and puerile report just made by the Interstate Commerce Commission on the operations of the Standard Oil Co. I wish, in fairness to a corporation which has been made the scapegoat to carry the sins of every trust and combination in the land, my readers would glance over this report, or at least over the summary which the news-

papers have given. It is the slimmest thing of the kind I have ever seen. An effort was made after a long-protracted investigation, the overhauling of all the company's documents, the delving into its private affairs, the hauling of its chief officers into court for examination and cross-examination, to say the worst that could be said regarding the company. What is the summing up of the report? Simply that the Standard Oil Co. has sought, by every method within reach, to increase its business and to take away the business of its competitors.

It is true that because of the large amount of traffic it gave to the railways the company received in years gone by substantial rebates on freight charges. But that is an old matter, for since the rate law has been enforced the Standard Oil has obeyed it and every other statute. If it has reached out to secure business wherever it could find it, and if in so doing it has taken business away from its competitors; if it has used its capital to build its own pipe lines and enjoy the advantage this has given it of carrying oil to market more cheaply than its competitors, it has done precisely what every corporation and every merchant and every trader, from the boys who swap jack-knives and lead-pencils up to the leading bankers in the world, do. The Standard Oil has used the best brains it could get to develop its business. If it had used its brains and enterprise to develop someone else's business, or if it had failed to do the very best it could in every way to get the trade which was open to competition, it would have been unfair to its 6000 stockholders and would have fittingly deserved rebuke.

The Standard Oil has not enriched itself by obtaining, as other corporations have done, the priceless gift of exclusive franchises. It has established its own business in its own way and built it up to magnificent proportions because it had behind it the American intelligence and push which have enabled its organizers to overcome difficulties and make the company the greatest corporation of its kind in the world. Bear in mind that I say "the world," for 70 per cent. of its business is in other markets than our own. It is the greatest exporting oil company of the globe. The persistent assaults on the Standard Oil, on the packing-houses, the railways and other corporations and industries by State legislation, by acts of Congress, acts of Cabinet officers and presidential messages I said long ago could have but one effect in the end, and that must be to create widespread distrust of American business methods.

GEORGIA CLAYS.

[Columbus *Enquirer-Sun*.]

A careful investigation is now being made of the white clay belt, which extends entirely across the State from Augusta on the east to Columbus on the west, with Macon about its center. This work is being done by the State Geological department.

It has been placed especially in the hands of Assistant Geologist Otto Veatch, who is devoting all of his time to this particular work.

Already something like 30,000 tons of kaolin are being shipped annually from Georgia to other States, most of which is being used by the Northern paper manufacturers as a filler.

A quantity of this kaolin is shipped to Ohio and New Jersey potteries, where some of the finest grades of china are manufactured. Ohio is the greatest pottery center in the United States, and yet not one pound of white clay has been found there.

The Georgia geological department believes that this industry can be built up here at home; that we can establish suc-

cessful potteries for the manufacture of all grades of china, even approaching the finest, practically right at the site of the mines.

The work is being done with this hope and this end in view.

NEW USE FOR CONCRETE.

[Iron Age.]

Repairing breaks in the hull of a sunken steamer with concrete is a new departure, but one likely to prove frequently useful. The scheme was successfully tried upon the steamer *George W. Elder*, which was sunk in the Columbia river over two years ago, and remained under water many months. The boat struck on a jagged rock, which stove several holes in her iron hull; the principal one, about 80 feet from the bow, measured about 35 feet in each direction. Through this enormous gap the rock projected into the hold for nearly 11 feet. A bulkhead was built by divers forward of the break and another aft, and two more after of the engine-room. Heavy canvas was then placed over the rock, which projected up into the ship, and concrete was placed over the canvas until a heavy covering had been obtained. This was supported against the outside water pressure by a concrete beam athwart the hold, measuring 18x48 inches and 38 feet long. The concrete was mixed and placed under water by divers, the cement being sent down a chute in sacks and the stone in a box.

Other smaller breaks having been similarly treated, the water was pumped out of the hold and the vessel floated and towed 40 miles to a drydock. One of the problems connected with concluding the operations involved the relation between the capacity of the pumps, which were discharging the water from the hold, and the flow through leaks developing around the huge cement cone, and at other points in the hull which had been severely strained by the action of the current during the 16 months of submersion. By the terms of the contract under which the salvage operations were undertaken the successful wreckers received \$30,000, as against nothing in case of failure. The original owners had sold the wreck for \$10,400, and as the cost of repairs was about \$20,000, the outlay of the buyer amounted to about \$60,000. After the ship was ready again for service an offer of \$160,000 was made for her.

SOUTHERN PROSPERITY.

[Springfield (Ill.) *News*.]

The London *Express* having boasted that England's wealth is increasing at the rate of \$7,000,000 a week, the *MANUFACTURERS' RECORD* is moved to give figures concerning the growing wealth of the South. To those who have not kept themselves informed of the industrial progress which is going on below Mason and Dixon's line these figures will come as a surprise. That the South was in a condition of prosperity such as it has never before known in all its history most people were aware, but from the figures of the *MANUFACTURERS' RECORD* it would appear that that section of the country might justly describe itself as "booming."

The increase in the true value of Southern wealth, it appears, has been \$2,690,000,000 for the past 12 months, or about \$7,300,000 for every day of the year, including Sundays and holidays. What is England's boasted \$7,000,000 a week compared to this! And the natural resources of the South are so great that it seems certain that these figures will seem small beside those of future years. With this immense increase of daily wealth going on, one visiting the South now—except in a few centers like Norfolk, Newport News, Birmingham or Atlanta—receives the impression of a country awaiting develop-

ment. Under the blighting system of slavery the South could never have reached her present industrial condition or have had such a future before her as she has today. But those changed conditions, which have been more than 40 years working themselves out, seem to assure her now of as great a future as her sons are claiming for her.

EFFECTS OF HIGH COSTS.

[New York *Journal of Commerce*.]

It is not by any means railroads alone that are feeling the effect of the high cost of doing things, which means high wages for labor and high prices for everything used. The check that this high cost imposes may appear first or most prominently in railroad work, but it is putting an adverse pressure upon other enterprises of extension and is causing a halt. A great deal is under way, but caution is beginning to appear in calculations beyond present requirements. The chief factor in inducing a reaction is undoubtedly labor cost, the pushing up of wages and pushing down of hours, with diminished efficiency in production. It is the general testimony that the demand for labor created by the intense activity of the last two years has created a feeling of independence and a disposition to press demands that has resulted not only in high cost of labor, but impaired efficiency. The increased cost is out of proportion to the advance in wages, on account of shorter hours and reduced production per man. If the tide is turning it is because the advance in wages and in prices has gone so far that it has reached a culmination and must recede. It is making the cost of living and of carrying on business so high that consumption of the products of labor has to be curtailed. It will be fortunate if this is only a gradual recession for a readjustment of the equilibrium, for if the process had been carried much farther, or should yet be carried much farther, there would be a violent break.

COST OF CRIME.

[New York *Mail*.]

"There are probably 10,000 crooks at liberty in this city right now," says Inspector McLaughlin, "and something must be done to get the better of them." Ten thousand is a good many, a good many too many. If all of them should attempt tonight to break into as many apartment-houses there would be burglars under roofs sheltering a slumbering population of at least half a million. If they kept that up for a week, every resident of the city would have a burglar either as a caller or as a neighbor in some flat of the same building. That such a population of predatory or dangerous persons should be at large is an indictment of our civilization as well as of our jurisprudence and criminology. * * * The State has a constant prison population of 3000 men, and every day is releasing, at the expiration of their sentences, men who it is morally certain will steal again when they get the chance. The very name "ex-convict" carries a suggestion of desperation or indirection. Rev. John J. Munro figures out that crime costs this city nearly \$43,000,000 a year, and the entire nation \$1,076,327,605. A very large proportion of these amounts is to be charged to the account of men released from prison with the full belief of the authorities that they were going forth to repeat their offenses.

CHEAP WATER TRAFFIC.

[Pittsburg *Dispatch*.]

Another index of the value of water navigation is interesting. Up the Monongahela every trunk-line system entering Pittsburg has extended its feeders to get a share of the freight produced by the developments of which the improved waterway is the foundation. Up the undevel-

oped Allegheny no competing line has deemed it worth while to go further than necessary to get a route to the lakes.

New manufacturing sites are at a premium about Pittsburgh, but industry has been slower in going up the Allegheny than in any other direction. There is no other explanation for this than the absence of cheap water transportation for coal and other raw material in large volume. Six miles of the Allegheny river have been improved, and they carried 2,400,000 tons of freight last year. Twenty-five miles will be slackwatered by the end of the year, and the facilities thus afforded will undoubtedly be a great stimulus to the industrial growth of that section.

SAVING FORESTS.

[Brooklyn Daily Eagle.]

At least two Eastern national parks are quite as imperative as any Western irrigation plan, not primarily to create pleasure and health resorts, but so that the forests of those positions of the first strategic importance shall come under government care and shall not be stripped. The first of these is the Appalachian Park, in the Kentucky, Tennessee, Virginia and Carolina region, and the other is a White mountain park to protect the forests of that range. The Appalachian country includes the backyards of six States, and unity of action is impossible among them, even if the States did not need all the money they can raise by taxation for schools. The State of New Hampshire may not be too poor to create a State park of the White mountains, but the people of the State think they are, and the lumber companies interested in stripping that protective timber are too powerful with the State Legislature for such a step to be taken. Besides, the park would protect the headwaters of the Connecticut river; the Saco and other streams which contribute as much to the wealth of other States as of New Hampshire. Two national park reservations around Mount Mansfield and Killington in Vermont would also reinforce powerfully the headwaters of the Connecticut and raise the level of Lake Champlain. The Connecticut and Lake Champlain are national possessions, and the cost of their protection should not fall upon the people of any one or two States. The rich State of New York has trouble enough protecting the headwaters of its Hudson to show how little can be hoped from smaller States whose forests cover an interstate watershed. It is high time that this work of reforesting our hillsides receive serious attention in Congress, and every man who helps to create sentiment for that step does good service.

WHEN PRESSES STOP.

[Troy (N. Y.) Times.]

Into the merits of the disagreement between the Butte publishers and their employees it is neither necessary nor desirable for outsiders to enter. The feature of the situation which must inevitably invite consideration is the light thrown on the relations which newspapers bear to the communities in which they are published. It is very apparent from the facts as given that the newspapers play a most important part in the social and business life of Butte, and what is true of that locality is correspondingly applicable to other places. Perhaps the people of Butte knew it before, and perhaps they did not, but they have now had the most convincing proof that their local newspapers minister very materially to their comfort, welfare, convenience and profit. The lesson has been impressed upon their minds by temporary deprivation of facilities which it may be they had come to regard as a matter of course and the value of which they may not have realized.

Newspapers have their faults and fail-

ings, very much as is the case with human beings. But they also have a place in the economy of modern life which bears a close relation to the good of the community; in fact, the newspapers in one way or another come into contact with about all the complex interests which make up the highly organized society of the present day. Imagine the deadness of a town in which there was no newspaper published and no one who cared to read a newspaper issued there or elsewhere!

STEEL AS A GAUGE.

[Pittsburg Chronicle-Telegraph.]

Iron is the barometer of national prosperity. When the iron and steel business is active the people are doing well. Iron and steel are not merely in good demand, but the demand is growing. When E. H. Gary, chairman of the board of directors of the United States Steel Corporation, was asked as to the state of the steel trade, he said: "The steel situation is sound from every standpoint. The corporation is booking more new business than at this time last year. New orders, in fact, are running about 6000 tons a day in excess of what they were a year ago." While this condition continues not much importance attaches to the pessimism of railroad presidents and managers whose gloomy predictions are born of the fact that they are now being brought to the bar for past excesses and unfair treatment of shippers and stockholders. Their woes are their own, and not the nation's.

MOUNTAIN OF FISH.

[Hartford Courant.]

By reason of the activities of our fishing fleet last year quite a number of the "wretches of the sea" definitely ceased to pass their Sundays in any manner. The vessels of the fleet made 6906 trips to the fishing grounds last year, and on their return unloaded at Boston 89,693,370 pounds of fish, worth \$2,117,324, and at smallest Gloucester 80,707,840 pounds, worth \$1,955,038; total weight of the fish landed at those two ports last year, 170,401,210 pounds; total value, \$4,072,362.

In 1906 the Boston and Gloucester fish houses handled 36,195,616 pounds of fresh cod and 18,323,093 pounds of salted cod; 5,100,960 pounds of fresh cusk and 229,658 pounds of salted cusk; 61,195,359 pounds of fresh haddock and 400,478 pounds of salted haddock; 13,027,064 pounds of fresh hake and 260,275 pounds of salted hake; 8,522,499 pounds of fresh pollock and 987,763 pounds of salted pollock; 4,018,565 pounds of fresh halibut and 635,881 pounds of salted halibut; 1,739,740 pounds of fresh mackerel and 2,099,600 pounds of salted mackerel; 6,717,691 pounds of other fresh fish, 10,946,968 pounds of other salted fish. They handled 4,248,120 pounds of frozen herring from Newfoundland and 9,127,068 pounds of salted herring from the same inexhaustible source of supply. Again the bureau in its bulletin conceals the year's catch of swordfish off Block Island under the title "other fish," and we wish it wouldn't.

Imagine the 170,401,210 pounds of salt-water fish brought to Boston and Gloucester last year heaped up in a single pile. What an impressive mountain of sea food it would be.

AMAZING BANKING GROWTH.

[Wall Street Summary.]

Available statistics on Federal and State banking for the past five years supply an astonishing record; in fact, trust companies and State banks are growing more rapidly than national banks. For the five-year period ended January 30, 1907, loans and discounts increased \$1,334,640,535, an excess of 42 per cent. over the previous five years. Bonds and securi-

ties, other than Government bonds as security for circulation and deposits, held by national banks increased more than \$200,000,000. The specie held has increased more than 25 per cent., and resources of all kinds in the period mentioned almost 40 per cent. Capital, surplus and undivided profits increased 40 per cent., and individual deposits about 38 per cent. A record like this is traveling some.

WAREHOUSES FOR COTTON.

[Bulletin of Association of American Portland Cement Manufacturers.]

Cotton being a highly inflammable material, this enterprise demands warehouses of fireproof construction. Warehouses should be divided into sections or pockets to contain not over 1000 bales each, stored on end and not piled in mass. Such warehouses will then correspond to the best and safest now built in connection with textile factories for the storage of wool, jute and hemp.

Concrete is the safest and cheapest material for this service. Such warehouses may be placed where land values are low, space ample and railway tracks readily provided on both sides of long ranges of such pockets of 1000 bales each. The floor space required for 1000 bales with suitable alleyways would be about 8000 square feet in one pocket, of which five may be placed side by side with party walls between, parapetted above the roof, on less than an acre of ground. This form of construction would certainly be far superior to the old method of constructing wooden buildings, on which a very high rate of insurance is charged.

The cost of sprinkling apparatus in concrete buildings would vary according to the conditions, but would be very small compared to the security given and would be necessary to the negotiations of permanent insurance to the capacity of these storehouses, so arranged that each warehouse receipt would also carry the guarantee of strong insurance companies covering the risk of fire to the measure of the capacity of the building.

Those interested in this subject may obtain copies of the bulletin entitled "Concrete Construction—Its Fireproof Qualities," by addressing the association.

FARMERS' INSURANCE.

[Boston Transcript.]

Years ago farm buildings were a desirable property to insure. They are now looked upon as so hazardous that many fire insurance companies will not write them at all, and in the case of the Middlesex Mutual Company the proportion of farm risks has fallen to approximately 10 per cent. of the company's business, and this the least satisfactory of the company's writings. This experience is much the same as that of other insurance organizations. Under the mutual system the Massachusetts farmers who are insured are getting their protection at considerably less than cost, at the expense of the protected town and city property, and the country mutual companies are desirous of having the opportunity given them of making, in the matter of dividend payments, a special class of farm property, paying in return premiums on these policies only so much as the fire loss experience in this class of insurance warrants them in paying. Under such circumstances it is urged that thousands of farmers could obtain adequate insurance, an advantage which under existing conditions is denied to them.

EDUCATION AND APPRENTICESHIP

[American Cotton Manufacturer.]

There are many who believe that American manufacturers do not pay enough attention to the uplifting of their operatives, especially such as will soon take their fathers' places in the mills and carry on the great textile industry of the country.

They point out the fact that there is no system in general use according to which the youth of the mills may obtain schooling and at the same time serve as apprentices, thus obtaining the necessary theoretical and practical knowledge of the trade which they are shortly to take in their hands. In certain sections where there are many technical schools the apprentice system is generally neglected, the multiplication of trade schools seeming to have the tendency of underrating the necessity for apprenticeship. Education and apprenticeship should go hand in hand, according to a scheme which was outlined in the editorial columns of this journal several weeks ago. In this age, when there is such a cry for education, it should not be forgotten that apprenticeship is equally as important. The apprentice who does not receive instruction in the principles which underlie his work will develop into an unintelligent worker by rule of thumb. On the other hand, one who does not undergo the severe drudgery of the workshop will fail utterly when brought face to face with the practical demands which are made upon all operatives. It follows that the apprentice system should be adopted in all cases. Under this system the apprentice spends a portion of his time in the workshop, while during the remainder he attends classes in order to receive instruction in the technique of his trade.

MUNICIPAL PARENTHOOD.

[New York Globe.]

It is highly desirable in the interest of the general public that children be properly nourished during their school years and also that any remediable defects of sight or hearing be removed. It is, on the other hand, also desirable that the parents of these children should retain their self-respect and feeling of individual responsibility toward them—should not, in short, be pauperized by the city and relieved of a duty which true parental affection makes a labor of love.

There is obviously plenty of room for honest difference of opinion as to which aspect of the question is the more important. It may be said, however, that, as Mr. Stern pointed out at the last board meeting, this is not a city of poverty, and there are probably very few children in the schools whose parents are not financially able to supply them with sufficient wholesome, nutritious food to meet all physiological requirements. Furthermore, a very serious difficulty in the way of free school lunches would be the invidious comparison raised between "mealers" and non-mealers. Oliver Twist's difficulty in getting rid of the brand "work'us" might easily be duplicated in the case of the mealers.

This danger could, of course, be avoided by supplying all the scholars with free meals, but such wholesale catering would surely be an expensive way of securing proper nourishment of the relatively few children who now suffer for lack of food. Still another argument against the extension of such charity in the schools is that there is no logical limit to it short of the municipality's taking entire charge of the child's upbringing—a state of affairs which public opinion is certainly not yet ready to sanction.

A CANAL AT SEA.

[Memphis Commercial-Appeal.]

The Canal Commission has been subjected to almost as many revolutions as a South American republic, and still everything seems to be more or less at sea. The cost of excavation, as we showed yesterday, is something extraordinary, and at this rate the canal will cost nearer a billion dollars than the original appropriation. It would be cheaper, perhaps, to abandon the whole enterprise, and we could save money by taking up Nicaragua,

but, of course, this will not be done. But at any rate the people of the United States have a right to insist that the enterprise shall be turned over to some practical men with full authority to carry it to a finish.

GETTING BACK TO COAL.

[New York Commercial.]

An order by the Southern Pacific Railroad Co. to a Pittsburg mining company for 250,000 tons of coal to be delivered at the company's wharves in New Orleans marks the beginning of the end of oil for fuel—at least, for a time. The return of this company to the use of coal is forced by the growing scarcity of oil and the consequent high prices. When oil was first discovered in Texas, and the interest thus awakened had extended to neighboring States, it was believed that the supply was inexhaustible. In the days of the big Beaumont "gushers" how to dispose of the rapidly-accruing product was a serious problem. It was cheap—so cheap, indeed, that at a glance coal appeared to have been put entirely "out of business," and it was so heralded by the prophets. For a time this plentiful supply continued, and was added to from various quarters by new discoveries. Then the Southern Pacific was persuaded to consume it as fuel. The present action of the company does not mean that the oil supply of the Southern fields is exhausted, nor does it imply that new discoveries are unlikely; but it does project simply the hard, unescapable fact that oil as available is no longer the best material for fuel when expense is considered.

HARNESSING WATER-POWERS.

[Atlanta Constitution.]

The Constitution has consistently preached that the people of Georgia were not fully alive to the possibilities dormant in the streams and falls of the State. They have been demonstrated at Columbus, Atlanta, West Point and Augusta and other scattered locations, but there has been comparatively little systematic effort at development all over the State.

There is sufficient power going to waste in the creeks and rivers of Georgia to operate the lights, the electric lines and the factories of the Commonwealth. The largest expense is that of installment, after which energy is supplied at a low cost which even discounts the advantages of our proximity to the coal fields of Alabama.

It is the primary rule of modern industry to reduce the expense of production to a minimum. Herein lies Georgia's opportunities as regards her water-powers. It is a plain business proposition, and the sooner our business men view it in that light and expend money on surveys and power plants that will bring into subjection these now useless powers the sooner will their dividends and the aggregate wealth of the State show a corresponding increase.

If thrifty New England, where water-power is utilized to its last possibility, possessed Georgia's idle assets they would years ago have been made to bear their part in the creation of wealth and development.

CAUSES OF PROSPERITY.

[Dallas News.]

But the chief cause, after all, of the present abundance and distribution of wealth is due to the constantly-increasing use of labor-saving machinery. It has been clear from the beginning that where one machine, attended by one man, produces commodities equal to the labor of, say, 50 men, the industrial world should be fifty times richer by the operation. Apply this reasoning to all kinds of commodities produced by machinery, and the wonder is that we have not felt its effect long ago. The reason we have not felt its effect

so forcibly before was on account of faulty distribution. The goods were produced in abundance. The wealth was created, but it got congested where those who needed it could not get it, and instead of making the country richer, it created periodic panics. This was called "overproduction," and acted on the economic body like a fit of indigestion in the natural body. The fit used to come at regular intervals and made the whole country sick. It is believed, however, that we have now learned how to take care of our national stomach so that indigestions will not be so frequent hereafter, just as a boy learns to take care of himself after a few overdoses of green apples. This country—indeed, all industrial countries—is becoming more skillful in adjusting supply to demand, while, on the other hand, through the operation of the trades-unions and other causes a higher rate of wages has been brought about, which, in turn, insures at once a broader and more equitable distribution of the wealth created and a larger consumption of the things produced. Thus, given a largely-increased producing capacity to the industrial world, and at the same time a greater consumptive capacity and broader distribution of wealth to the mass of the people, the condition of greater prosperity we now observe must logically follow.

EGGS IN CUBA.

[Charlotte (N. C.) Chronicle.]

The Dilworth man who advertises that for the small sum of 25 cents he will supply a food that will set all the hens on the lot to laying ought to buy up a carload of fowls and put out for Cuba, where, evidently, eggs is eggs, to judge from the price they fetch there. Eggs sent from Miami to Cienfuegos retail in that town at seven cents each at the present time, and sometimes reach the price of 10 cents each, while imported sell from four to six cents each. Imported eggs come in boxes of 200 each. A local dealer states that he buys them from a Havana importer; that a case laid down there costs about \$9.50, and that he sells them to retail dealers at from \$10 to \$11 a box. The Cuban duty on eggs is \$5 per 100 kilos (220 pounds) and 30 per cent. advalorem, less 20 per cent. United States reciprocity discount. A box of eggs weighs 51 pounds, the tare is 11 pounds 10 ounces, leaving a net weight of 39 pounds 6 ounces. Cuba would seem to be the goal for the man with the hens and the stuff that makes them lay eggs.

FOR MOTIVE POWER.

[Wall Street Journal.]

So revolutionary were the discoveries of steam power and electricity that it behooves us to watch the advent of any new force for this class of service. Yet has not such an event occurred in the extensive use of gas and gasoline? Of the three forms of power embodied in the construction of the 22,000 automobiles made in 1905, over 86 per cent. were propelled by gasoline. The number and various classes are as follows:

Power.	Machines.	Value.
Gasoline.....	18,699	\$19,566,941
Electric.....	1,425	2,496,255
Steam.....	1,563	1,688,038
Total.....	21,687	\$23,751,234

From this it appears that both steam and electricity, the main sources of mechanical power, are exceeded by this newer agent whose power-producing value has risen so suddenly. In this direction there is every prospect of still greater gains, if one may rely on the judgment of mechanical engineers who have paid attention to the subject. Far more rapidly than we are aware of, the crude method of producing power by steam is being eliminated in certain forms of mechanical operation. Of the storage battery, until Mr. Edison has finally spoken one cannot speak with con-

fidence. Experiments on street-car lines have not been very satisfactory, and the storage-battery equipment of auto cars appears to be much less in evidence than formerly.

Apart from the propulsion of machines on land an equally wide field awaits the application of such devices to water craft. As yet practically nothing has been done to apply the improvements of mechanical fields to the low-draft freight and passenger vessels in rivers, harbors and inlets of the lakes and seaboard regions. Nevertheless there are hundreds of small communities to whom transportation service of this character would be a great boon. Here is a field for people of foresight in which a moderate outlay of capital would no doubt bring ample returns.

DRAINAGE BY CANALS.

[Jackson Dispatch, Birmingham News.]

President Walter Clark of the Mississippi Cotton Association is an enthusiastic advocate of the creation of the Cold Water drainage district, preliminary organization of which was perfected several days since. The enterprise is one of exceptional magnitude, and is backed by the foremost citizens and planters in that section of the State. A carrying out of the plans of the commission means that not less than 60,000 acres of valuable lands will be reclaimed, the counties of DeSoto, Panola, Tate, Tunica and Quitman being affected. The plan in prospect is to cut several canals along the course of the Cold Water river, shortening the meanderings of that stream and reclaiming a vast area of fertile soil now inundated for a greater portion of the year. The Cold Water, while a small stream, flows down with much force from the hills of DeSoto county, and competent engineers who have given the topography of the country a thorough study are confident that the plan of reclamation can be carried out at a very small expense as compared with the value of the lands that will be reclaimed.

SOUTH CAROLINA TEA.

[James H. Rice, Jr., in Columbia State.]

The public has been accustomed to hear of tea-growing in South Carolina through reports sent out of Dr. Shepard's tea gardens at Summerville. South Carolina has enjoyed the reputation of being the only State in the Union that had a tea farm. But the gardens at Summerville, fine as they were, could claim no more than that they were supported by Government bounty.

It has remained for others to exploit the commercial possibilities of tea, and there is now a large tea farm at Rantowles, in Colleton county, just a short distance from where the Charleston & Savannah Railroad crosses Rantowles creek.

Here the American Tea Growing Co. has planted 1000 acres in tea and has already shipped one crop. They have no doubt at all of the success of their experiment, and are going ahead with full confidence in the venture.

The American Tea Growing Co. was organized in 1901 and the first plants set out in January, 1903. The seed was all native and of the Darjeeling, Assambybrid, Chinese and Kangra varieties. The first crop was harvested in 1906.

The process consists in picking the three tip leaves and stems to the third leaf. These are withered on the second floor of the factory, where a special space of 4000 feet is devoted to that purpose. After 18 hours the leaves are swept down through a chute into a large rolling machine. After 50 minutes the rolled leaf is screened, and that which has not been sufficiently rolled is rerolled in a smaller machine.

The leaf is then allowed to ferment from two and one-half to four hours, after which it is dried by a special machine in

which hot air is blown over and through the leaf at a temperature of 220 degrees. The tea is then transferred to bins and at the end of the season cut, blended and graded by special apparatus provided for this purpose.

The bushes are picked at periods varying from 10 days to three weeks, and from the first of May to the first of October. In winter the bushes are severely pruned in order to increase the number of young shoots for the following season.

The life of a bush varies from 300 years in China to 30 in Ceylon. The only guide to the life of a tea plant in this country is a healthy plant at the Middleton barony, on Ashley river, which was set out in 1804.

PANAMA.

[Houston Post.]

We are destined to encounter at no distant day that restiveness and dissatisfaction which are inexorable when the people witness a constantly-increasing stream of expenditure with the realization of their hopes receding further and further into the future. We know that the Government does not work rapidly or economically on any project. We know that its custom is to pay about twice as much for any given project as the private citizen would have to pay for it, and it will be none the less true of the Panama Canal than it has been of hundreds of smaller projects of less difficulty and less importance which have been dragging along for years.

The only thing we can say to those people who some four years ago became excited over the canal project is, be patient. Thousands, yes millions, of them may just as well make up their minds that they will never live to witness the mingling of the oceans at the isthmus, and that instead of the \$175,000,000 which it was thought the Panama Canal would cost, as against \$180,000,000 for the Nicaragua project, the ultimate cost will swell into hundreds and hundreds of millions of millions before their dream comes true.

And yet why should we bother? We have had our share of the worry already. And think how many generations to follow us will have to do their worrying over this same project and dump their scores of millions into it, even as the people of this time are doing now.

The progressiveness of the New Orleans Board of Trade is no better shown than in its twenty-fourth annual report, which has recently been issued. This volume, in addition to containing all of the officers' and committee reports, also contains a valuable and interesting trade review and statistical report compiled by the secretary and treasurer, H. S. Herring. This review covers in detail the results accomplished along all lines during 1906.

The Wheeling (W. Va.) Board of Trade has published in an attractive and handy form its yearbook for 1907, containing reports of its officers and facts and figures concerning the city. It also tells what the Board of Trade has done and is doing for the promotion of the city's commercial and industrial interests.

The Southeastern Saddlers and Harness Makers' Association will meet at Louisville, Ky., March 27, in connection with the Greater Louisville Exposition.

It is estimated that the Alabama Legislature has appropriated this year more than \$3,000,000 for education in the State.

Taxable realty values at Columbus, Ga., have increased by \$1,109,525, or 11.61 per cent., during the past year.

Subscribe to the MANUFACTURERS' RECORD. Price \$4 a year, or six months for \$2.

BALTIMORE SEWERAGE BIDS.**Opportunity for Work Involving More Than \$1,500,000.**

Bids are now being asked by advertisement for one of the largest pieces of sanitary sewerage construction work ever let in the South. This particular piece of the work involves an outlay of over \$1,500,000, and is in connection with the complete sanitary sewerage system now being constructed in Baltimore under the \$10,000,000 sewerage loan.

Contractors who are capable of handling work of this character will find in Baltimore an opportunity to submit bids that will be received entirely on their merits, with no discrimination or favors entering into the final awards. This is a fact attested by frequent examples where contractors have received large contracts since Baltimore's great fire. The work of the Board of Awards, the municipal body which lets all contracts, has been characterized by fair and impartial treatment to all bidders, whether from home or abroad.

The work for which bids are now being asked was assembled in quantities large enough to make it attractive to large firms accustomed to handling big propositions, and at the same time, with a desire to give the small man an equal show, the work has been subdivided into a number of sections, for each of which a separate bid must be submitted. In this way a contractor can bid on any or all of the work as he may desire.

The amount of work involved, together with the character of the work, is best judged by the following list of approximate quantities: Outfall sewer (11 feet by 12 feet 3 inches concrete sewer); section 3, 2981 lineal feet; section 4, 2947 lineal feet; section 5, 2975 lineal feet; section 6, 3248 lineal feet; section 7, 2852 lineal feet; section 8, 2900 lineal feet; section 9, 2672 lineal feet; section 10, 2778 lineal feet. High-level interceptor (8 feet 4 inches diameter concrete sewer); section 1, 2535 lineal feet and section 2, 2665 lineal feet. West low-level interceptor (concrete sewer); section 1, 350 lineal feet, 84-inch; 720 lineal feet, 80-inch; 645 lineal feet, 76-inch circular sewer, and section 2, 1940 lineal feet 74-inch circular sewer. Cleaning and grading site of the Back river disposal works; 120 acres of land to be cleared; 428,825 cubic yards excavations; 331,150 cubic yards rolled embankment and 3500 lineal feet vitrified underdrain.

Other details concerning the work and methods of bidding will also be found in the advertisement which is now running in the *Daily Bulletin of the Manufacturers' Record*, and any other information that may be desired will be furnished by the Sewerage Commission, Calvin W. Hendrick, chief engineer, 904 American Building, Baltimore.

The bids are not to be opened until April 10, and this allows ample time for any contractor to investigate the character of the work for himself before deciding to submit a bid. The opening of the bids is always done in public, and any bidder, should he so desire, is given the privilege of scrutinizing the bids of other contractors before they are referred to the Sewerage Commission for tabulation and report.

The "Progressive Washington Edition" of the Washington (D. C.) *Post* covered the progress that has been made in all lines of municipal government and improvement, financial institutions, retail, wholesale and manufacturing enterprises, real estate and building and education, medicine and law. The edition had 66 pages, and was profusely illustrated with photographs of men prominent in the city's affairs, prominent buildings and scenes in and around the city.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

PENNSYLVANIA SYSTEM.**Gross Earnings of All Roads East and West of Pittsburgh Over \$295,000,000.**

The annual report of the Pennsylvania Railroad Co. for the year 1906 shows that the gross earnings for all lines directly operated were \$148,239,882, operating expenses \$101,805,644, net earnings from operation \$46,434,238. After deducting rentals paid to roads operated on the basis of net earnings the net operating earnings left were \$39,133,338. Interest from investments amounting to over \$12,000,000, together with rentals of equipment and other items, bring the gross income of the company up to \$51,917,601. After the payments of rentals on leased roads, interest on bonded debt and on mortgages, ground rents, etc., the net income left is \$35,674,300. After paying over \$4,000,000 to sinking and trust funds and car trusts and over \$8,700,000 for extraordinary expenditures, besides nearly \$20,000,000 in dividends aggregating 6 1/2 per cent., there was left \$2,500,000, which was transferred to the extraordinary expenditure fund. The amount to the credit of profit and loss therefore received no addition during the year, and is the same as it was a year ago, \$24,725,484.

The general balance-sheet shows total assets of \$593,515,894, which includes the cost of road and equipment and real estate, \$251,766,899, and securities owned, \$197,939,121. The New York Tunnel Extension is put down for \$28,835,033, and current assets at \$77,238,532.

The gross earnings of all lines of the Pennsylvania system east and west of Pittsburgh for 1906 were \$295,898,165, operating expenses \$211,543,706 and net earnings \$84,354,399. As compared with 1905, the increase in gross earnings was \$29,828,567 and in net earnings \$10,385,149. There were 363,955,827 tons of freight moved on the system, an increase of 37,978,938 tons, and there were carried 140,513,364 passengers, an increase of 14,569,825.

East of Pittsburgh and Erie the tonnage moved was 172,371,063, an increase of 15,367,296, or 9.79 per cent., and the passengers carried were 62,108,708, an increase of 6,326,899, or 11.34 per cent.

The company increased its equipment during the year by 198 locomotives and 23,803 cars.

The company is continuing work upon the extension of the four-track system, so as to make it complete all the way from New York to Pittsburgh. The tunnel work at and through New York is also being pushed. Work is well advanced upon the approaches to the Hudson river tunnels on the New Jersey side, and the excavation for the new station in New York city is practically complete and foundations for the columns which will support the station and the viaducts are being placed.

Concerning the business of the company, it is specifically noted that movement of both freight and passengers continues to show exceptional increases, and that there was a very slight increase in the average rate and in the net earnings per ton per mile, but the cost of transportation will be affected by advances in labor and materials.

Little Rock's Union Station.

The MANUFACTURERS' RECORD has previously referred to the awarding of contracts for the erection of the new \$300,000 union station at Little Rock, Ark. The structure will be used, as was the old wooden building, by the St. Louis South-

western Railway. Its foundations are completed, and the superstructure and the retaining walls are now being built. Besides the main line of the Iron Mountain system, branch lines to Fort Smith, Ark., and to Alexandria, La., center at Little Rock. The construction contract was given to the Murch Brothers Construction Co. of St. Louis, Mo., and the architect was Theodore C. Link of St. Louis. Messrs. Westinghouse, Church, Kerr & Co. of New York built the foundations.

Mr. E. F. Mitchell, engineer of construction for the Missouri Pacific system, has described the station in the *Railroad Gazette* as follows:

"The building is two stories high, with a basement and attic and a tower 120 feet high, its main front toward the city. It will be 315 feet long by 60 feet wide at ends, and 78 feet wide through central portion, and will have an ell at west end 48 feet wide and 23 feet long; built of gray pressed brick with Batesville stone trimmings; roof of red tile.

"The surroundings and topographical conditions were favorable to an elevated station, and that type was chosen. The floor of the basement is at the track level and the floor of the main waiting-rooms is approximately at the level of the main streets approaching them, which merge into a plaza on the southerly side of the building opposite the tracks. From the main floor level a covered 'midway' bridge extends over the passenger tracks and platforms, which are reached by easy stairs. Four passenger platforms covered with umbrella sheds will be built, each 1200 feet long, extending 600 feet each way from the center of the 'midway.' The basement floor, which is at the track level, will be occupied by baggage-rooms, express-rooms, commissary, storerooms and kitchen.

"In the central part of the first or main floor is the main waiting-room, 110x57 feet. It is entered from the plaza through a loggia 14 feet deep, extending its full length. This room will have marble tile floor, marble wainscot, plastered walls, and the exposed woodwork will be oak. At the west end of this floor is a ladies' retiring room and toilet-room, and a smoking-room and toilet-room for men; also restaurant and kitchen. On the east of main waiting-room are railroad and Pullman ticket offices, parcel check room and receiving room for baggage, the latter having a chute to main baggage-room in basement. Beyond these in the east end is the waiting-room for negroes, 45x57 feet, and for emigrants, 32x57 feet, each having toilet-rooms. Along the northerly side of the main floor is a gallery 16 feet wide, connecting with the 'midway,' on which center the stationmaster's office and the bureau of information.

"The second floor of the building will contain the offices of the general superintendent, division superintendent and the operating department organization. A portion of the attic will be finished and used for record rooms."

Seaboard's New Officials.

Mr. W. A. Garrett has been elected president of the Seaboard Air Line to succeed the late Alfred Walter. Mr. Garrett has been vice-president and general manager of the Seaboard Air Line for several months, having come to that system from the Queen & Crescent Route. In the position of general manager of the Seaboard he has been succeeded by Mr. T. F. Whittelsey, who has just come to the system from the position of second vice-president and general manager of the Mobile, Jackson & Kansas City Railroad.

Mr. Garrett is 45 years of age and a native of Canton, Miss. Starting as a messenger in the ticket office of the Mis-

issippi & Ohio Railway in 1876, he has steadily advanced, most of his rise being in the service of the St. Louis Union Depot Co., which he entered as office messenger and rose to be assistant superintendent. Then he became superintendent of the Terminal Railroad Association in St. Louis, also for the Wabash road and Merchants' Bridge in St. Louis. After this he occupied positions as division superintendent on the Wabash Railroad and then went with the Philadelphia & Reading Railway, rising to be general superintendent, which he left in 1903 to go with the Queen & Crescent as general manager.

Mr. Whittelsey is a native of Richmond, Ky., and is a civil engineer by profession. Before going to the South he served with various railroads in the northern part of the middle West, starting in 1876 as a freight clerk on the Lake Shore & Michigan Southern Railway at West Detroit, Mich. He was advanced to the engineer's office, out of which he became assistant trackmaster and then rose to be division superintendent on various divisions. From that road he went with the Toledo & Ohio Central and the Kanawha & Michigan Railway as general superintendent. Next he became general manager of the Toledo Railway & Terminal Co. at Toledo, Ohio, from which position in 1905 he went with the Mobile, Jackson & Kansas City road.

An Interurban Electric.

Mr. J. W. Baxter writes from Fayetteville, Ark., to the MANUFACTURERS' RECORD concerning his proposed electric railway and power plant. He has been in the field looking over the route. The plans are to connect the more important points in the northwestern part of Arkansas and the southwestern part of Missouri with an interurban electric railway, besides operating street railways in each town and supplying towns with electric power. The current will be generated at a point on the White river by means of a system of dams, or possibly locks, each dam giving from 15,000 to 20,000 horse-power. The total will be about 200,000 horse-power, all of which can be readily utilized, as the road will tap a country that now has no road in a radius of over 125 miles, and is rich in timber, marble and zinc.

Continuing, Mr. Baxter writes that rights of way, franchises, etc., are now being secured. The company is not yet incorporated, nor are those interested ready to let contracts. The company will be organized under the laws of Arkansas with \$150,000 capital, to be increased to \$15,000,000 capital as the road is built. Offices will be in Fayetteville.

In conclusion, Mr. Baxter says: "We will build by bond issue and could give some man skilled in handling bond issues a fine offer. Mr. J. T. Evins of Fayetteville and Mr. J. C. Bonnell of St. Louis will be associated with me in the work."

Mr. Baxter is president of the Baxter Orchard Planting Co.

New Equipment.

President J. T. Harahan of the Illinois Central Railroad says that the company has ordered 3500 freight cars, including box cars, coal cars and flat cars; also five locomotives. The value of the order is over \$4,200,000. The cars are to be delivered all by next October, and the locomotives in August.

The Norfolk & Western Railway, according to a report from Philadelphia, has ordered 100 locomotives, 50 from the Baldwin Works and 50 from the American Locomotive Co. It has also ordered 1000 steel coal cars from the Pressed Steel Car Co. In addition to this equipment, the railroad company will build 1500 coal cars in its own shops at Roanoke, Va.

The Louisville & Nashville Railroad

has received 25 new locomotives from the Baldwin Works, this being half of an order given in December.

The Louisville Traction Co. of Louisville, Ky., has ordered 50 new cars, which are expected to be received in time for summer business.

The Nashville Railway & Light Co. of Nashville, Tenn., has ordered 30 double-truck cars.

The South & Western Railway Co. is quoted as denying the press report from Johnson City that it had ordered 120 locomotives and 5000 cars.

The Atlantic Coast Line, it is reported, will purchase 2000 more cars.

The Tremont & Gulf Railroad, it is reported, is in the market for from 100 to 200 logging cars.

The St. Louis & San Francisco Railroad, it is reported, will soon let a contract for locomotives as follows: 25 consolidation, 10 10-wheel passenger and 10 switching.

The Baton Rouge, Hammond & Eastern Railway is reported to have ordered 30 locomotives, 1000 gondola cars, 500 flat cars and 500 box cars, besides 40 passenger cars.

The Texas Company of Beaumont, Texas, is reported to have purchased from the American Car & Foundry Co. 400 oil tank cars.

The Washington, Baltimore & Annapolis Electric Railway Co. has ordered 25 passenger cars from the Niles Car Co. of Niles, Ohio.

KANSAS CITY TERMINAL.

Union Depot Agreement With Municipality Provides for Huge Outlay.

The Kansas City Terminal Railway Co. and the municipality have agreed upon terms for the great improvements which are to be made for the accommodation of the railroads entering Kansas City, the plans settled upon providing for an expenditure totaling \$50,000,000 or \$20,000,000 more than the first estimates.

The railroads will provide a new union station to cost \$2,000,000, 40 wagonway viaducts and two viaducts for foot passengers to get across the tracks. An elevated roadway will also be built and five union stations for handling local freight will be erected.

To complete this work extensive changes and improvements will have to be made in the truckage in the city. The city grants the Belt Line the right to build four more tracks, making it a six-track road, and a 50-year franchise is granted for a union freight line on the North Side.

"Orient" to Lay More Track.

The Kansas City, Mexico & Orient Railway has ordered 40,000 tons of 70 and 80-pound steel rails from the United States Steel Corporation, and deliveries will begin this month. The company has also ordered 1,100,000 ties from different points in Texas, Louisiana, Arkansas, Missouri and Mexico. The main-line track to be laid in the United States is 290 miles, and this will leave 300 miles in Texas and 100 miles in Kansas to be built to complete the road on this side of the Mexican border. About 60 miles are to be laid in Mexico with part of the new rail ordered.

Natural Bridge Railroad.

Mr. J. L. Phillips, president of J. L. Phillips & Co., manufacturers of yellow-pine lumber, writes from Thomasville, Ga., to the MANUFACTURERS' RECORD: "The Natural Bridge Railroad, which we bought, is a small road built through our timber for the hauling of our product, and the 15 miles of extension which we are making is merely to reach timber and haul out manufactured product to the main

line. It is nothing more than a sawmill railroad. It will connect Vereen, Fla., on the St. Mark's division of the Seaboard Air Line, with Chaires, Fla., on the main line 12 miles east of Tallahassee, and will traverse 32 miles of timbered territory belonging to us.

"There will be no bids for construction work, as we are doing it ourselves, and we will not purchase any additional equipment.

"The officers of the road are J. L. Phillips, president; J. S. Gordon, vice-president, and Chas. Phillips, Jr., Thomasville, Ga.; W. A. Hayes, general manager; J. H. Davidson, superintendent, Vereen, Fla."

Railroad Reports.

The Gulf & Ship Island Railroad reports for January gross earnings, \$225,364; operating expenses and taxes, \$168,586; net earnings, \$56,778. In January of last year the gross earnings were \$193,138 and the net were \$65,898. For the four months ended January 31 the gross earnings were \$1,407,781, net earnings \$324,271. For the corresponding period of last year the gross earnings were \$1,187,725 and the net \$390,915.

The Louisiana & Arkansas Railway Co. reports for January gross earnings, \$88,381; operating expenses and taxes, \$68,016; net, \$20,365. For the same month last year the gross earnings were \$95,571 and the net \$33,796. For the seven months ended January 31 gross earnings were \$675,880, net \$192,042. For the same period of last year gross earnings were \$552,633, net \$208,149.

Figures furnished by Fisk & Robinson of New York.

Cumberland River & Nashville.

The Cumberland River & Nashville Railroad Co., 429 East Broadway, Louisville, Ky., informs the MANUFACTURERS' RECORD that it is ready to begin construction and wishes to purchase 20 miles of either new or good relaying rails weighing 60 pounds per yard with all connections, and second-hand equipment. A deck-plate girder bridge 1000 feet long is to be built across the Cumberland river.

Appointed Purchasing Agent.

The Southern Railway Co. announces the appointment of Mr. A. Gordon Jones as purchasing agent, with office at Washington, D. C., vice Col. Joseph P. Minertree, deceased. Mr. Jones has been superintendent at Charleston, S. C.

To Develop 200,000 Horse-Power.

There have been several reports as to a proposition of capitalists for the development of water-power properties on the White river in Arkansas. The MANUFACTURERS' RECORD has been advised regarding the plans for undertaking this enterprise. Mr. J. W. Baxter of Fayetteville, Ark., is the prime mover, and Messrs. J. T. Evans, also of Fayetteville, and J. C. Bonnell of St. Louis, Mo., are interested with him. They intend to form a company with a nominal capital stock of \$150,000 and increase this to \$15,000,000 in the future. It is proposed to build a system of dams, or possibly locks, and obtain from 15,000 to 20,000 horse-power at different locations on the White river, the total power available being estimated at 200,000 horse-power. This power will be transmitted by electricity for the operation of an inter-urban railway system in Arkansas and Missouri, lighting and power plants and manufacturing industries. Rights of way and franchises are now being secured, but the promoters are not yet ready to consider proposals for machinery and supplies. Further details will be announced when arrangements have been completed ensuring the establishment of this enterprise.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

Barbour Cotton Mills.

The Barbour Cotton Mills of Clayton, Ala., referred to last week as incorporated with capital stock of \$50,000, has purchased and put in operation the Chewalla Cotton Mills at Eufaula, Ala. There are 5800 spindles and 148 looms in position, and the product is wide print cloths, about 125 operatives being employed. The Barbour company has organized with Robert Moulthrop, president; J. F. White, vice-president and general manager, and W. L. Wild, secretary-treasurer.

Knitting Mill Improvements.

The Unaka Knitting Mills of Johnson City, Tenn., is reported as to make improvements to its plant, including the addition of 25 knitting machines and the erection of a modern dye plant. This company is now operating 25 knitting machines, and its enlargements will increase daily output of hosiery from about 150 to 300 dozen pairs. Its new dyehouse will cost probably about \$3000.

New Knitting Company.

The Chatham Knitting Mills Co. of Durham, N. C., has been incorporated with a capital stock of \$50,000 for the purpose of manufacturing knit goods. The incorporators are Messrs. W. T. Cole, J. H. Stone and A. V. Sorrell.

Textile Notes.

The Eastman (Ga.) Cotton Mills has increased capital stock from \$58,000 to \$100,000.

It is reported that the Pendleton (S. C.) Cotton Mills has begun the erection of an additional building and will increase its spindleage equipment from 3100 to 10,000.

The D. Frank Snyder Silk Ribbon Co. of Hagerstown, Md., has reorganized and elected the following officers: President, A. M. Evans; treasurer, George K. Hartman, and secretary, John W. Rohrer.

It is reported that the Williamsburg (Va.) Knitting Mills has begun the erection of an addition 16x85 feet in order to provide space for new spinning machinery which has been contracted for. This company spins yarn and knits underwear, having about 150 operatives now engaged.

The Valley Cotton & Grain Manufacturing Co. has been incorporated with capital stock of \$75,000 to build a cotton mill to be operated by water-power at Harms, Tenn. Its incorporators are Messrs. G. F. Pitts, L. E. Strong, E. H. Pitts, Thomas Bagley, J. T. and F. H. Pitts.

Messrs. Britton Bros. of Dallas, Texas, have made a proposition to the Mayor of Sulphur Springs, Texas, for the establishment of a \$125,000 cotton mill in the latter town. They offer to organize a company with capital stock of \$125,000, asking that local investors subscribe \$50,000 of the capital.

A report from Laurens, S. C., states the Watts Cotton Mills has awarded contract to Messrs. T. C. Thompson & Bros. of Birmingham, Ala., for the erection of a 95-foot extension to present buildings. This company is operating 31,680 spindles and 712 looms, and presumably intends to install additional machinery.

It is reported that Geo. Warren of Boston, Mass., has submitted a proposition to organize a \$300,000 cotton-mill company at Shawnee, O. T. Another report from Shawnee is that Avalard Howard of Stafford Springs, Conn., and two New England manufacturers propose building a \$250,000 cotton mill at Shawnee.

COTTONSEED

Erecting Oil Mill.

Writing the MANUFACTURERS' RECORD with reference to the organization of a company to establish a cottonseed-oil manufacturing plant, Mr. W. A. Barclay of Crenshaw, Falls county, Texas, says: "The matter of organization of a company for cotton-oil manufacturing at Burlington, Texas, is pending. Construction is going ahead, but the company will not be organized prior to May 1. Its officers will be G. W. Barclay president and W. A. Barclay vice-president, the secretary to be chosen. Capital to be employed will be \$50,000. We will use the expeller system, and have bought four presses and eight linters to begin with, intending to increase should the system prove advantageous and occasion justify. We will also add a small refinery to work up our own oil only. In connection there will be a cotton-ginning plant with a capacity of 150 bales per 24 hours. The seed from this gin plant will go directly into the seedhouse, and thereby save handling. We also contemplate feeding the greater portion of our hulls, after having ground and bolted them, so as to take the meal for export. After bolting sufficient meal is left to season the hulls. The writer has fed cattle on mill products for many years."

Cottonseed-Oil Mill.

Dr. G. R. DeLaurel, president and manager of the Broussard (La.) Cotton Oil Co., Ltd., which was organized several weeks ago with a capital stock of \$40,000 and afterward increased to \$60,000, writes the MANUFACTURERS' RECORD that his company will install a 60-ton cottonseed-oil mill. The plant will be modern in every detail, containing two presses the first year, with ample power for operating purposes. The main structure will be of brick, two stories high, 180x40 feet. Estimates have been considered and contracts will be awarded within a few days. In addition to Dr. DeLaurel, the other officers of the company are Messrs. P. A. Duplex, vice-president; Paul Billeaud, secretary; H. Billeaud, treasurer, and F. E. Voorhies, superintendent and chief engineer.

Memphis Warehouse Co.

The Memphis Warehouse Co. of Memphis, Tenn., amended its charter last week in order to increase capital stock from \$300,000 to \$550,000. It has been previously referred to at length by the MANUFACTURERS' RECORD in connection with plans for building a system of warehouses and compresses on the Illinois Central Railway in South Memphis. Altogether the company will have 160 compartments for cotton, each with a storage capacity of 1000 bales, making a total of 160,000 bales. Four compresses will be provided of sufficient capacity for pressing the cotton received at these warehouses. It is understood that 40 warehouses are about completed and that 60 more will be completed by September. Sixty more are to be completed early in 1908. Two compresses are now about ready for use.

Contract for a new steamship of 7500 tons for the Clyde Line, operating between New York, Charleston and Jacksonville, has been let. The vessel will be 375 feet long and 48 feet beam.

MINING

Rich in Minerals.

A few square miles of Tennessee are included in the North Carolina quadrangle called Nantahala, which Mr. Arthur Keith of the United States Geological Survey has recently described in a geologic folio. This area, which contains 985 square miles, lies in Graham, Swain, Macon, Clay and Cherokee counties, North Carolina, and Monroe and Blount counties, Tennessee. As considerable deposits of marble, talc, kaolin, soapstone, mica, corundum, building and ornamental stone, iron ore, gold, lime and clay are found in this quadrangle, the data contained in Mr. Keith's folio will be of interest and value to those who desire the industrial development of this part of the world.

The Nantahala quadrangle is included entirely in the mountain division of the Appalachian province, the name given to that part of the country which extends from the Atlantic coastal plain on the east to the Mississippi lowlands on the west, and from central Alabama to southern New York. The Nantahala quadrangle includes the Great Smoky mountains on the north, the Blue Ridge on the southeast, and various cross ranges in the center. The surface of the region is that of a number of mountain ranges running in various directions, separated by narrow stream valleys and small plateaus. The area which lies in Tennessee is very small, and differs in no respect from the North Carolina portion.

The general geologic record of the region as written in its rocks is carefully traced by Mr. Keith. After describing the various formations, he discusses the geologic structure of this area, which is further illustrated by a sheet of structure sections. In conclusion, he takes up the economic resources of the quadrangle, which are very considerable.

One of the most important rocks in this district, from the commercial viewpoint, is marble. It covers many square miles, as shown on the geologic maps which illustrate the folio, and it outcrops along two principal lines. One of the chief sources of talc in the United States is the series of deposits in the Murphy marble in this quadrangle. Kaolin is known to occur in quantity at seven localities within the Nantahala quadrangle, all within four miles south or east of Almond. In three places on the headwaters of Shooting creek soapstone is found in sufficient purity and body for commercial use. In the pegmatites of the Archean rocks mica occurs in crystals large enough to be of commercial value. It has been mined chiefly in a belt passing northeast and southwest near Wayah Bald. There are eight localities within this area where corundum is known to occur. It is mined only at Corundum, on Little Buck creek, and is cleaned and graded in a mill at that point.

Iron ore is found in many situations in this quadrangle. The ore is in all cases brown hematite, and for the most part occurs as deposits in the residual clays. In only one place near this quadrangle do the ore bodies attain any size. That is on Hazel creek, just across the northern border, where deposits of this character have been rather extensively developed.

This region has for many years been the scene of mining for gold. Its chief forms of occurrence are the veins and stringers of gold-bearing quartz in the Cambrian slates and schists and the Archean gneisses and the gravel deposits derived from the same veins and occupying the neighboring stream bottoms. Other occurrences of gold of less importance and practically untested are the deposits of gold-bearing galena which occur in the Murphy marble at various points, and the iron ores of the

Andrews schist, which contain a small percentage of gold. The only deposits which have been worked for gold are those along Valley river below Andrews. As this region is one of the best watered in the United States, hydraulic mining is easily carried on here.

Material for the production of lime is common throughout the extent of the Murphy marble. Some of the layers contain as high as 93 per cent. of carbonate of calcium, and layers of sufficient purity are plentiful. The chief deposits of clay are in the small hollows near the heads of the streams on the old plateau and terrace surfaces. There are a great many of these within the quadrangle, and the total amount of material of that kind is very large. The quadrangle contains a great variety of building stone, but none of it is at present developed.

Alabama's Coal Production.

According to figures issued several weeks ago by State Mine Inspector J. M. Gray of Alabama, the coal production in that State for 1906, as compared with the production for 1905, indicated a decrease of 453,992 tons. With a few mines still to be heard from, the figures then available showed the production for 1906 to be 11,446,161, while that of 1905 was 11,900,153 tons. Since issuing the first report the State mine inspector has received figures from several large mines which had not then reported, the revised figures now showing that, instead of a decrease, there was in reality an increase of nearly 1,000,000 tons as compared with the production for 1905. For 1906 there was a total of 12,769,775 tons, with all the mines in Jackson county and one each in Walker and Tuscaloosa counties not heard from. It is believed that the mines not reporting produced over 100,000 tons. The output according to counties was as follows: Bibb, 1,220,534 tons; Blount, 159,963; Cullman, 115,607; De Kalb, 32,834; Etowah, 130,660; Jefferson, 6,629,392; Marion, 60,895; Shelby, 176,660; St. Clair, 219,478; Tuscaloosa, 1,041,192; Walker, 2,972,197; Winston, 10,363.

To Develop Feldspar Properties.

Information regarding the mining of feldspar and its use in manufacturing and for other industrial purposes is wanted by James L. Hunter, care Planters' Cotton Oil Co., Augusta, Ga. Mr. Hunter advises the MANUFACTURERS' RECORD that he has a feldspar deposit which he contemplates developing and is desirous of knowing details as to the various uses of feldspar. He also wants to correspond with manufacturers of machinery for pulverizing and handling the product.

Wants Genuine Fuller's Earth.

From 100,000 to 1,000,000 cubic yards of genuine fuller's earth are wanted by J. F. Donahoo, Munsey Building, Washington, D. C. Mr. Donahoo advises the MANUFACTURERS' RECORD that anyone having this quantity of fuller's earth for sale is requested to send him full particulars—location, distance from railway, sample to be analyzed, etc.

Mining Notes.

Coal and coke exports from Baltimore, Md., for the month of February amounted to 41,297 tons of coal and 6265 tons of coke, with a total estimated value of \$141,793.

Shipments of coal from Newport News, Va., for the month of February amounted to 36,472 tons, valued at \$100,942. West Indian ports and Caribbean Sea ports received most of the shipments.

This year's assessment of property in Columbus, Ga., shows an increase of approximately \$1,000,000 over 1906.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Creosote Analysis.

Trade Bulletin No. 13 of the Forest Service of the United States Department of Agriculture states that the growing scarcity of lumber, with consequent high prices, is making it imperative that more attention be paid to preservative processes whereby the time of service of timber may be lengthened. Coal-tar creosote is generally regarded as the most efficient wood preservative. It is variable in its composition, owing to differences in the coals used and the methods of distillation. In order to determine the relative merits of the creosotes of different compositions, the Forest Service is now carrying on an investigation. It is stated that the most important part of creosote analysis is the fractional distillation, as by this operation an approximate determination is made of the relative proportions of the most important substances in tar oil. There are differences of opinion as to the best way of carrying out the fractionation of tar oils. By experiments the Forest Service has shown that the difference in weights of fractions obtained when using different kinds of distilling vessels is not large, but that the composition of the fractions indicates a better separation by the flask than by the retort. Regarding the influence of rate of distillation, variations of from one to three drops per second have but slight influence on the weights of fractions, though the slower rate is more satisfactory. It is commonly believed that the relative amounts of light oil, naphthalene and anthracene oil are the most important factors determining the value of creosote for wood preservation. From a number of creosotes which were fractionated the average of results shows that at least 25 per cent. of naphthalene was present in the distillate between 205 degrees and 250 degrees C., and that over 25 per cent. of anthracene oil solids are present in the distillate above 300 degrees C. Work on the specific gravity and the index of refraction of the distillates between different temperatures is now going on. Circular No. 80, Fractional Distillation of Coal-Tar Creosote, detailing an account of methods employed in the experiments and results obtained, may be had upon request to the Forester, Forest Service, Washington, D. C.

February Building Operations.

Activity in building construction throughout the South and Southwest still prevails, and February's operations compare very favorably to those of previous months. In Atlanta, Ga., permits were issued for the erection of buildings to cost about \$602,252, an increase over January of \$117,355. Prominent structure for which permits were granted include the Masonic Temple to be erected at a cost of \$175,000 and a warehouse for the Atlantic Compress Co. to be erected at a cost of \$100,000. Permits were issued in Chattanooga, Tenn., to the number of 127, with a valuation of \$81,220, and in Knoxville to the value of \$49,585. The permits issued in Memphis for the month number 131, with an estimated value of \$479,257, an increase over February, 1906, of \$178,395. The city building inspector of Louisville, Ky., issued 152 permits during February, representing a value of \$157,250. In Oklahoma City, O. T., about 100 permits were issued during the month, the greater number being for residences. Two hundred and thirty-five permits were issued in Washington, D. C., representing a value of \$820,427. Among the structures were 57 brick and 25 frame buildings. In

Jacksonville, Fla., 81 permits were issued during February, and in Birmingham, Ala., the cost of building construction for the month is estimated at \$109,590.

Timber in Alabama.

A very important deal in Alabama timber lands is the recent purchase of about 44,000 acres by Messrs. Foshee & Miller of Brewton, Ala. President F. H. Lathrop of the Lathrop Lumber Co., Birmingham, in discussing this deal and the general timber situation in Alabama, is quoted as saying:

"The price paid for timber lands depends on the size of the tract and the timber on it. It is reported that recently \$46.50 per acre was paid for a tract of about 44,000 acres, the extent of which probably influenced the price. Then the facilities have something to do with it. On a large tract a large plant can be erected, which adds economy in working up the timber.

"I do not know exactly how much timber there is in Alabama. I suppose there is almost 2,000,000 acres, although that is a rough guess. There are several companies which have tracts of 100,000, and a number of smaller companies with lesser tracts. That is original growth."

To Erect Sawmill.

The MANUFACTURERS' RECORD is advised that the Grant Lumber Co. of Clio, Ark., will erect a sawmill in Grant county to have a capacity of from 40,000 to 50,000 feet of lumber per day. Contracts for all necessary equipment have been awarded, and the mill is expected to be ready for operation within 30 days. The property to be developed consists of about 10,000 acres of yellow pine and hardwood. The Grant Lumber Co. is at present operating a mill at Kedron, Ark., on the line of the St. Louis Southwestern Railway, with a capacity of 30,000 feet of hardwood lumber per day. Officers of the company are Messrs. S. B. McCartney, president and treasurer, Clio, Ark., and Robert York, vice-president and secretary, Pine Bluff, Ark.

Lumbermen at Jacksonville.

The Georgia-Florida Sawmill Association met at Jacksonville, Fla., on February 25 for the transaction of routine business and adjourned to meet at Tifton, Ga., on March 12. In the afternoon of the same day representatives of a number of lumber associations held a meeting for the purpose of considering a closer business relationship. The following associations were represented at the meeting: Wholesale Lumber Dealers' Association of New York, New York Lumber Trades Association, Yellow Pine Exporters of New York, Lumbermen's Exchange of Philadelphia, Lumber Exchange of Baltimore, Boston Lumber Trade Association, South Carolina Lumber Association and the Georgia-Florida Lumber Association.

Activity at Gulfport.

Under date of March 2 Mr. S. C. Gardner, secretary of the Progressive Business League of Gulfport, Miss., advises that the total amount of lumber cleared for foreign ports during February was 33,017,000 feet, board measure, which is the largest amount that has ever cleared from that port in a single month. All lines of business are brisk, and the future of Gulfport seems bright. The amount of timber in sight for Gulfport cannot be cut in the next 50 years, so it is estimated by good authorities, and this insures a steady and growing condition. The shipments of lumber are not like cotton and grain; there is a cotton season and a grain season, while with lumber and naval stores it is the same all the time so far as season is concerned.

Wood for Box Manufacturing.

Box manufacturers who are prepared to purchase several hundred thousand feet of lumber suitable for boxmaking are invited to address Daniel McKie of Woodlawn, S. C. Mr. McKie advises the MANUFACTURERS' RECORD that he wishes to dispose of that quantity of wood.

Lumber Notes.

Lumber shipments from Gulfport, Miss., for the week ended February 26 amounted to 10,210,000 feet, board measure.

The schooner Edwina cleared from Wilmington, N. C., last week with a cargo of 434,000 feet of lumber for New York. The shipment was consigned by the Angola Lumber Co.

The Lutzer & Moore Lumber Co. of Orange, Texas, has cleared the schooner James Pierce from Sabine Pass with a cargo of 1,500,000 feet of lumber for Philadelphia, Pa.

Messrs. C. H. Benedict, C. B. Benedict, M. F. Green, Walter Keith and John Byrns have incorporated the Conasauga (Tenn.) Lumber Co. with a capital stock of \$160,000. The company has purchased the timber rights on 30,000 acres of land and will erect a sawmill for its development.

The steamer Comanche cleared from Jacksonville, Fla., last week for New York with a cargo of 420,000 feet of lumber, 3500 boxes of oranges, 2000 barrels of naval stores, 1675 sacks of clay and 1320 sundries. The schooner Alice Holbrook cleared for Cuba with 12,300 cross-ties. This cargo was shipped by G. S. Baxter & Co. for the Western Railway of Havana.

The Austin Lumber Co. of Columbia, Miss., has been incorporated with a capital stock of \$150,000 and will, it is stated, locate a new station on the New Orleans Great Northern Railroad in Marion county to be known as Jamestown. Mr. N. B. Noble is the president of the company, and Messrs. W. H. Bundy, Butler McClanahan and Charles J. Welsh are also interested.

FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

Furniture for Cuba.

P. D. de Pool, Obispo No. 7, Havana, Cuba:

"Wishing to handle furniture on the commission basis, I beg you to give me the names and addresses of some manufacturers. Chairs and reed furniture are in great demand in this country, and if some Southern manufacturer can be arranged with so much the better, because the freight rates are cheaper from the South than from the North or East. Now that we have a steamship line to Brunswick, Ga., there is a good chance for Southern manufacturers."

Manufactures for Turkey.

Edouard Indjeyan, Constantinople, Turkey:

"My business was established in 1900, and I act as commission agent for manufacturers and exporters throughout the world. I desire to represent American manufacturers, and am now prepared to correspond with them, especially those offering leather goods, iron, oil, oiled paints, etc."

The Board of Trade of Bremen, Ga., has been organized with Dr. N. K. Phillips, president; J. J. Mangham, secretary, and Charles L. Copeland, treasurer.

MECHANICAL

Benjamin Outlet-Box Receptacle.

The Benjamin Electric Manufacturing Co. of Chicago is placing upon the mar-

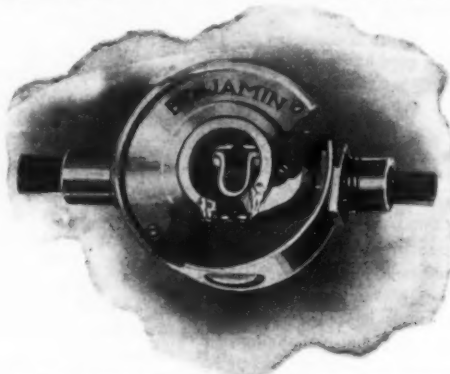


FIG. 1.—BENJAMIN OUTLET-BOX RECEPTACLE.

ket a new No. 6-B receptacle specially designed for use with outlet boxes. This receptacle has a number of strong, attractive features, mentioned as follows:

"Its contacts do not project beyond the walls of the receptacle, and therefore do



FIG. 2.—BENJAMIN RECEPTACLE, UNMOUNTED.

not readily come in contact with the metal parts of the box or projecting parts of the conduit. Wires are easily spread around the base, thus making slack wire unnecessary. Binding screws are accessible from the front, obviating the necessity of re-

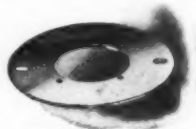


FIG. 3.—BENJAMIN RECEPTACLE.

versing the receptacle or of tapping wires to make connections. It may be connected while in position in the box, the cover being attached after connections have been made.



FIG. 4.—BENJAMIN RECEPTACLE.

Figs. 1 and 2 showing it mounted and unmounted.

"A steel-plate cover (Fig. 3) is furnished, through which the porcelain receptacle slightly projects. Over this a polished brass cover (Fig. 4) may be used



FIG. 5.—BENJAMIN RECEPTACLE.

with or without shade holder. Where a shade holder is desired it is spun upon the brass plate, forming a neat and substantial device (Fig. 5).

"A special point of interest attaches to these receptacles in connection with their

contemplated use in the Port Huron tunnel of the Grand Trunk Railroad. The accompanying cut (Fig. 6) shows a vertical cross-section of the box to be used. It is of cast iron, with threaded outlets to



FIG. 6.—BENJAMIN RECEPTACLE.

receive the conduit, thus securing a watertight joint. A rubber gasket extending from the outer edge to the center opening, through which the socket projects, is placed under the steel-plate cover. Both the outer edge and the socket are thus protected against moisture. If found necessary, a vapor-tight globe will be screwed against the rubber gasket. If no globe is used, as will probably be the case with so

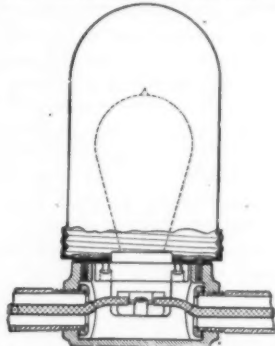


FIG. 6.—BENJAMIN RECEPTACLE.

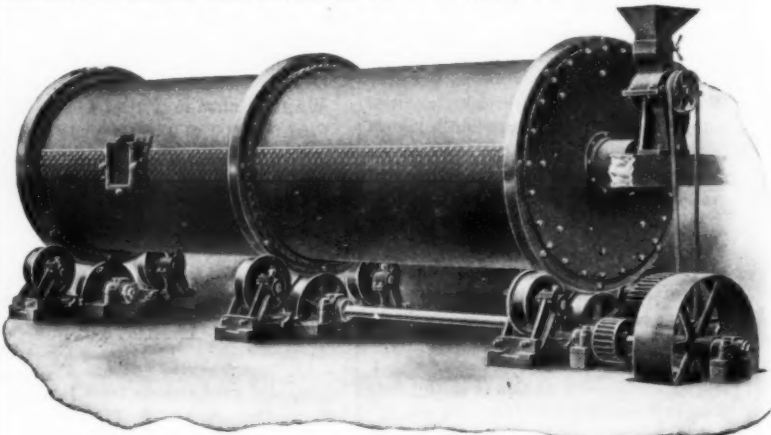
tight a box, a rubber lamp ring will be substituted. Globe holders of sheet aluminum will be supplied.

"Where it is deemed desirable to use a guard, provision is made for attaching it directly to the holder.

"Complete protection for any or all conditions is afforded for this serviceable device."

Tube Mills on Tires.

In order to counteract any misunderstanding that tube-mill users may have as



TUBE MILL RUN ON TIRES.

to tube mills run on tires, the J. R. Alsing Company of 136 Liberty street, New York, has issued the following statement:

"The J. R. Alsing Company would like to call the attention of the public to a grievous stand taken by some milling men regarding tube mills run on tires, and that there seems to be a general impression that

the tires wear quickly from the great friction caused by the heavy cylinder revolving on the wheels. This may be the case with the two-wheel system of driving, where the cylinder acts as a wedge between the two wheels and thereby wears the tires and wheels in short order. But in our patented three-wheel system of driving the entire weight of the cylinder rests on the center wheel, whereas the other two wheels simply act as guides. The friction is thereby entirely obviated, and, of course, the extraordinary wear and tear on the tires and wheel is also obviated. A 6x16½-foot tube mill of our manufacture has been running for nine years at the rate of 24 hours per day, and the wear and tear on the tires during that period amounted to only one-eighth inch. This mill can be seen by anyone interested."

An accompanying illustration shows a tube mill built by the Alsing Company.

To Manufacture Cotton Gins.

Last June the MANUFACTURERS' RECORD announced the decision of the Fuller Combing Gin Co. of Charlotte, N. C., to build a large plant for the manufacture of its cotton gins at Chattanooga, Tenn. The arrangement of details has been delayed until the present time, and the company is now preparing to actively begin the construction of the proposed plant. It is understood that about \$75,000 will be expended for erecting the necessary buildings and installing the machinery for the initial plant, the structures to include a machine and carpenter shop, paint shop, planing mill, casting-house and foundry and power-house, all to be of brick and fireproof construction. There will be four two-story buildings and two one-story buildings, with a floor space of 55,600 square feet. Probably 125 men will be employed at the start, and by January 1, 1908, operations are expected to begin. The Fuller Combing Gin Co. will manufacture the gins from the raw material. Its gins are of an improved type, which comb instead of sawing the cotton from the seed, thereby lengthening the staple and increasing the value of the product. The company is capitalized at \$400,000, and James T. Fuller of Charlotte is president.

Architect Wanted for Church.

Advices received by the MANUFACTURERS' RECORD indicate an opportunity for an architect to receive the commission for preparing plans and specifications for a \$50,000 church in the South. The building is to be 70x100 feet in size, with stone

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Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY.

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY.

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY.

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

ALABAMA.

Alabama.—Timber Lands.—Reported that Foshee & Miller of Brewton, Ala., have purchased 44,000 acres of timber land in Alabama.

Anniston, Ala.—Engine and Boilers.—Lewis Iron Works, Inc., reported February 14 as chartered, will manufacture stationary engines and boilers. About \$10,000 will be invested.

Atmore, Ala.—Lighting and Ice Plant.—Atmore Lighting & Ice Co. has been incorporated with \$15,000 capital stock by M. M. Brooks, W. W. Lowery, Alice Peavy and others.

Bessemer, Ala.—Electric Plant.—Powell Electric Co. has been incorporated with \$2500 capital stock by A. S. Powell, George G. Neal and Matilda M. Powell.

Birmingham, Ala.—Hollow-tile Plant.—Birmingham Co-operative Hollow Tile Construction Co. has been incorporated with \$3000 capital stock by E. R. Retmyer, J. R. Payne and Griffin Lamkin.

Birmingham, Ala.—Land Improvement.—Blue Lake Land Co. has been incorporated with \$30,000 capital stock by J. Pearson and others.

Birmingham, Ala.—Land Improvement.—Edgewood Land & Improvement Co. has been incorporated by E. A. Fall, G. T. Brazelton and R. W. Snyder; capital stock \$10,000.

Birmingham, Ala.—Land Improvement.—Crescent Land Co. has been incorporated with \$25,000 capital stock by Walter B. Fowlkes, G. M. Bowers, J. D. Dabney and others.

Calera, Ala.—Lime Works.—Calera Lime Works has been incorporated with \$10,000 capital stock by O. Moss and W. H. Moss.

Demopolis, Ala.—Lumber Plant.—W. N. Sharpe, R. N. Matson, E. L. Taylor, E. R. Berry, H. B. McGarran, F. M. Smith and George Matson have purchased the plant of the Black Warrior Lumber Co., and it is stated they will enlarge and thoroughly equip plant, operating to full capacity.

Eufaula, Ala.—Cotton Mill.—Barbour Cotton Mills, reported incorporated last week (under Clayton, Ala.), has purchased and will operate the Chewalla Cotton Mills with 5800 spindles and 148 looms; J. F. White, manager.

Mobile, Ala.—Office Equipment.—Mobile Office Equipment Co. has been incorporated with \$10,000 capital stock; H. Tannenbaum, president; Leo M. Brown, vice-president, and D. C. McCoy, secretary-treasurer.

Mobile, Ala.—Wood-block Creosoting Plant.—Reported that the Republic Creosoting Co. of Indianapolis, Ind., operating a wood paving-block plant on Choctaw Point near Mobile, will at once double the present daily capacity of 1630 yards of paving.

Mobile, Ala.—Lumber Plant.—Terminal Lumber Co. has been incorporated with \$5000 capital stock by F. E. West, E. T. Hendon and E. W. Faith.

Mobile, Ala.—Oil-storage Stations, etc.—Reported that the Marine Oil Co. (main office, New Orleans, La.) has purchased the entire stock, unexpired contracts, etc., of the Pure Oil Co.

Selma, Ala.—Furniture Factory.—Johnson Furniture Co. incorporated with \$40,000 capital stock to continue an established enterprise. T. M. Johnson is president and treasurer, T. W. Danaby vice-president, Charles F. Bristlin secretary and H. B. Johnson manager.

ARKANSAS.

Brightwater, Ark.—Limekilns.—Incorporated: Brightwater White Lime Co., with \$2500 capital stock, by B. F. Baker, J. H. Buttram, M. Bray, E. C. Torbett and J. D. Torbett.

Camden, Ark.—Planing Mill.—Camden Mill Co. has increased capital stock from \$20,000 to \$50,000.

Deane, Ark.—Sawmill.—Deane Lumber Co. has been organized by W. E. Wadsworth and associates for the development of 4700 acres of timber land near Deane. A sawmill 26x94 feet is being erected and will be equipped for a daily capacity of 30,000 feet. (Referred to February 14.)

Delight, Ark.—Lumber Plant.—J. F. Blakeley, S. L. Blakeley, W. H. Bowers, A. E. Westbrook and J. F. Holcomb have purchased the lumber plant of R. B. F. Key, together with property in Pike county. The Delight Lumber Co. has been chartered with \$25,000 capital stock to operate the plant.

Devall Bluff, Ark.—Water-power Electrical Plant.—J. W. Baxter of Fayetteville, Ark., and associates propose to develop the water-power of the White river and transmit the power by electricity for operating electric railways, lighting and power plants and manufacturing industries. They will build a system of dams, or possibly locks, and expect to obtain from 15,000 to 20,000 horsepower at different locations, the total available being estimated at 200,000 horsepower. A company will be incorporated and organized to build the railway and power plants, capital stock to be nominally \$150,000 and be increased in the future to \$150,000. Mr. Baxter is not yet ready to consider proposals for machinery and supplies required. J. T. Evans of Fayetteville and J. C. Bonnell of St. Louis, Mo., are interested with Mr. Baxter.

Fordyce, Ark.—Lumber.—Chartered: Thomas Lumber Co., with \$10,000 capital stock, by J. B. Thomas, F. N. Harris, L. F. McMurry, W. A. Elliott and R. W. Mats.

Fort Smith, Ark.—Fuel Oil and Gas.—Fuel Oil & Gas Co. incorporated with \$25,000 capital stock by W. W. Johnson, Sam H. Milliken, George A. O'Hara, A. M. Carter and A. E. Northrop.

Fort Smith, Ark.—Shoe Factory.—Friedman-Shelby Shoe Co. of St. Louis, Mo., is reported as to erect shoe factory; four stories, 35x300 feet.

Grant County, Ark.—Sawmill.—Grant Lumber Co. (main office, Clio, Ark.) is erecting sawmill with a capacity of 40,000 to 50,000 feet, cutting about 10,000 acres of yellow pine and hardwood; contracts for all necessary machinery have been let, and the plant will be in operation in about 30 days. The company is now operating a 30,000-capacity hardwood mill at Kedron, Ark. S. B. McCartney, Clio, Ark., is president and treasurer, and Robert York, Pine Bluff, Ark., vice-president and secretary.

Hope, Ark.—Lumber.—Chartered: Baer-Betha Lumber Co., with \$15,000 capital stock, by C. J. Baer, C. N. Baer and W. T. Betha.

Huntington, Ark.—Coal Mines.—Smokeless Fuel Co., reported February 21 as increasing capital stock from \$12,000 to \$27,000, will sink a new shaft of about 600 tons daily capacity. C. C. Woodson is president.

Jonesboro, Ark.—Handle Factory.—Ohio Handle & Manufacturing Co., reported incorporated last week with \$25,000 capital stock, will have a daily capacity of 300 to 400 dozen handles. An ironclad building 60x100 feet will be erected. About \$10,000 will be invested in building and equipment. W. Hetherington is president and A. B. Wolverton vice-president and treasurer.

Lake Village, Ark.—Water-works and Electric-light Plant.—City will establish an improvement district for the erection and immediate completion of water-works and electric-light plant. Address The Mayor.

Little Rock, Ark.—Sewerage System.—The construction of sewerage system for the entire city is under consideration, and Burns & McDonnell, Dwight Building, Kansas City, Mo., have been commissioned to prepare maps and furnish an estimate of the cost of a complete and comprehensive system.

Marshall, Ark.—Cooperage Plant.—Reported that the Cincinnati Cooperage Co. of Cincinnati, Ohio, is arranging to increase the capacity of its plant. L. K. DeBus is vice-president.

Mobile, Ala.—Amusement Company.—Mobile Amusement Co. has been incorporated with \$10,000 capital stock to operate amusement enterprises; Charles R. Garnett, president and treasurer, and Carl A. Conley, general manager and secretary.

St. Paul, Ark.—Lumber Company.—W. G. McCoy, W. J. Ritchie, Charles Gilstrap and C. W. Hutchins have incorporated the McCoy-Ritchie Lumber Co. with \$35,000 capital stock.

Walnut Lake, Ark.—Lumber Plant.—Walnut Lake Cypress Co. has been incorporated with \$70,000 capital stock by E. P. Ladd, C. R. Bacon, R. E. Shultz and W. B. Craft; offices at Pine Bluff, Ark.

DISTRICT OF COLUMBIA.

Washington, D. C.—Hardware.—F. P. May Hardware Co., 634 Pennsylvania avenue N. W., has been incorporated with capital stock of \$300,000 to deal in hardware by Frank P. May, George J. May, Arthur J. May and James B. Brown.

FLORIDA.

Arcadia, Fla.—Sewerage System.—W. B. Clay, C. E., Montgomery, Ala., has been commissioned to make surveys, etc., for constructing proposed sewerage system. A committee, with Dr. E. Green, chairman, will have work in charge.

DeFuniak Springs, Fla.—Water-Works.—W. T. McCormick, Arcadia, Fla., will be engineer in charge of the construction of water-works and sewerage referred to last week. It is proposed to issue \$20,000 for water-works and \$3000 for sewerage. D. S. Gillis is Town Clerk.

Lake City, Fla.—Cigar Factory.—Company is being organized with J. F. Canova as president to establish cigar factory.

Pensacola, Fla.—Automobile Factory.—Everglade Automobile Co. of St. Petersburg, Fla., is communicating with the Chamber of Commerce relative to establishing automobile factory at Pensacola.

St. Petersburg, Fla.—Shipbuilding Plant.—St. Petersburg Shipbuilding Co. incorporated with \$25,000 capital stock. C. E. Burns of St. Petersburg is president, H. W. Thurman of Kissimmee, Fla., vice-president, and C. E. Burns of St. Petersburg secretary-treasurer and manager.

Tampa, Fla.—Brewery.—Florida Brewing Co. has increased capital stock from \$250,000 to \$300,000 and will make extensive improvements to plant.

GEORGIA.

Abbeville, Ga.—Electric-light Plant and Water-works.—Abbeville Electric Light, Water & Power Co. will make improvements to plant. A concrete building will be erected; lighting circuit 75 kilowatts. T. W. Childs is president and C. A. Childs manager.*

Atlanta, Ga.—Boiler Works.—J. J. Finnigan & Co. will rebuild that portion of plant reported February 14 as damaged.

Atlanta, Ga.—Soap Factory.—Krom Soap Co. incorporated with \$25,000 capital stock and privilege of increasing to \$100,000 by J. J. Krom, Randolph Rose and J. C. McMichael.

Augusta, Ga.—Feldspar Mines.—Jos. L.

Hunter is considering the development of feldspar deposits.*

Brunswick, Ga.—Machine Works.—Parker-Hensell Engineering Co. will erect a steel building 50x250 feet, costing \$40,000. A. R. Hensell is engineer in charge. (This company was referred to last week as arranging to rebuild machine works burned at a loss of between \$60,000 and \$80,000.)

Eastman, Ga.—Cotton Mill.—Eastman Cotton Mills has increased capital stock from \$58,000 to \$100,000.

Eatonton, Ga.—Sewerage System.—City will vote April 3 on the issuance of \$10,000 of bonds for completing sewer system referred to last week. B. W. Hunt is chairman of sewer committee.

Macon, Ga.—Railway Shops.—The Central of Georgia Railway directors have definitely decided to arrange for the construction of the company's proposed new shops, which will enlarge the present plant and increase the acreage for buildings, roundhouse and trackage. The company's engineers have prepared plans of the proposed buildings, and it is understood about \$1,000,000 will be expended for buildings and equipment of machinery; J. F. Hanson, Macon, president; T. S. Molise, Savannah, Ga., general manager. C. K. Lawrence, Savannah, Ga., is chief engineer, and it is understood he will have the supervision of the construction work for the new plant.

Moultrie, Ga.—Excelsior Factory.—J. F. Monk contemplates establishing excelsior factory.*

Pelham, Ga.—Public Improvements.—City will vote March 26 on the issuance of \$40,000 of bonds for public improvements. Address The Mayor.

Rome, Ga.—Electrical Transmission.—Hawessee River Power Co., operating a water-power electrical plant near Ducktown, Tenn., is reported as considering the transmission of electricity to Rome, a distance of 75 miles, and building a transfer plant at Rome, furnishing power to various manufacturing plants.

Rome, Ga.—Bridge Construction.—Southern Railway will remodel three old spans and re-erect them over the Etowah river, this being the connection between freight yard and main line. C. H. Ackert, Washington, D. C., is vice-president and general manager. (Referred to February 14.)

Sumner, Ga.—Sawmill.—Harris Lumber Co. of Quitman, Ga., will erect sawmill.

Sumner, Ga.—Sawmill.—Reported that Nicholson & Bridges will establish sawmill.

KENTUCKY.

Central City, Ky.—Brick Plant.—D. A. Woodburn, J. T. Woodburn and S. J. Glah have incorporated the Star Brick Co. with \$4000 capital stock; daily capacity 20,000 to 25,000 bricks; buildings erected.

Covington, Ky.—Electric-light Plant.—Geo. G. Beach, Mayor, states that the electric-light plant (reported last week as being considered) will not be constructed during the present year.

Crofton, Ky.—Telephone System.—Crofton & Brushy Fort Telephone Co. has been incorporated with \$20,000 capital stock.

Drakesboro, Ky.—Mining.—Black Diamond Mining Co. incorporated with \$10,000 capital stock by W. W. Bridges, L. V. Pierce and T. A. Isaac.

Elizabethtown, Ky.—Building Company.—Stewart Building Co. has been incorporated with \$10,000 capital stock by J. W. Stewart, Margaret M. Stewart and Ida S. Fisher.

Fordsville, Ky.—Planing Mill.—Fordsville Planing Mill Co. has been incorporated with \$8000 capital stock by Olla and Grace Wilson and Bartley and Emma Howard.

Glasgow, Ky.—Milling.—Glasgow Milling Co. has been incorporated with \$10,000 capital stock by J. S. Leech, H. Ralston and S. Goodman.

Hawesville, Ky.—Tobacco Plant.—Happy Hollow Tobacco Co. of Hawesville and Oklahoma City, O. T., has been incorporated with \$300,000 capital stock by V. O. Standish of Hawesville, John S. Adair of Stephensport, Ky., and John H. Meyers of Oklahoma City, O. T.

Hopkinsville, Ky.—Concrete Construction.—Mecham Construction Co., incorporated with \$10,000 capital stock, absorbs and succeeds the Mecham Engineering & Construction Co. R. E. Cooper is president, Rodman Y. Mecham vice-president and general manager.

ager and Green H. Champlin secretary-treasurer.

Linton, Ky.—Sewerage.—City is reported as considering issuing \$100,000 trunk sewer bonds. Address The Mayor.

Lexington, Ky.—Lath Mill.—H. C. Stull will establish plant to manufacture laths for house building, and has secured building at 630 Walnut street, which will be equipped for the purpose.

Louisville, Ky.—Paving Work.—Barber Asphalt Paving Co., 114 Liberty street, New York, has contract for paving 6888 square yards on 4th street at \$1.62 per square yard and 2718 square yards on Preston street at \$1.31 per square yard; G. W. Gosnell for paving six alleys at \$1.47 to \$1.50 per square yard, and L. E. Fligg three alleys at \$1.45 per square yard.

Louisville, Ky.—Construction.—Chartered: W. H. Lobb Construction Co., with \$10,000 capital stock, by W. H. Lobb, Emanuel Bakrow, Henry Koehler and associates.

Louisville, Ky.—Amusement Company.—C. A. Mitchell, L. R. Carson and Louis Olson have incorporated the Jefferson County Amusement Co.

Louisville, Ky.—Tobacco Factory.—Reported that the American Tobacco Co. will erect one or two-story addition 300x150 feet at a cost of \$50,000.

Louisville, Ky.—Shoe Factory.—Conrad Shoe Manufacturing Co. has been incorporated with \$100,000 capital stock by Willis S. Mullen, A. M. Dick and F. E. Reeser.

Mt. Olivet, Ky.—Lumber Company.—Gordley Lumber Co. has been incorporated by W. W. Gordley, N. T. Buckner and E. C. May.

Mt. Sterling, Ky.—Cannery.—Reported that Alban C. Tipton will establish bottling works.

Ore Knob, Ky.—Coal and Timber Development.—Reported that John H. and Henry C. Bartley have purchased 7000 acres of coal and timber land in Pike and Knott counties for development.

Paintsville, Ky.—Coal Mines.—Thealka Coal Co. has been incorporated with \$100,000 capital stock by J. C. Mayo, Alice Mayo, J. E. Buckingham and R. A. Patrick.

Stanton, Ky.—Cannery.—Stanton Canning Co. has been incorporated with \$10,000 capital stock by J. C. Patrick, M. A. Phillips, J. E. Lemming and J. B. Atkinson.

Williamson, Ky.—Stone Quarry, etc.—Williamson Stone Co. has been incorporated with \$4500 capital stock to quarry and crush stone and manufacture concrete blocks by W. T. Williamson, C. D. Meacham and L. R. Davis.

LOUISIANA.

Alexandria, La.—Water-works, Electric-light Plant and Sewerage.—City has voted affirmatively the \$25,000 bond issue mentioned January 17 for extending water-works, electric-light plant and sewerage system. I. W. Sylvester is engineer in charge and W. B. Turner Mayor.

Broussard, La.—Cottonseed-oil Mill.—Broussard Cotton Oil Co., Ltd., reported organized February 28 to erect 60-ton cottonseed-oil mill, has increased capital stock from \$40,000 to \$60,000. A two-story brick building 180x40 feet will be built. It is proposed to have only two presses the first year. F. E. Voorhees is superintendent and chief engineer.

Etherwood, La.—Sawmill.—Reported that Crawford & Mombolas have purchased timber lands near Morse and have established sawmill to cut cypress, pine, oak and other hardwoods.

Hammond, La.—Cottonseed-oil Mill.—H. A. Mullally of Houston, Miss., is building a cottonseed-oil mill.

Lake Charles, La.—Ice, Electric-light and Water-works.—Lake Charles Ice, Light & Water-works Co., it is reported, will install additional equipment, including 1000-kilowatt turbines. Company was mentioned January 3 as increasing capital stock from \$100,000 to \$150,000.

Mansfield, La.—Spoke and Handle Factory. J. C. Stokes will erect spoke and handle factory.

Napoleonville, La.—Plantation.—Sweet Home Plantation Co. has been incorporated with \$50,000 capital stock. A. A. Landry is president, U. B. Dugas vice-president, Alfred A. Landry secretary-treasurer.

New Orleans, La.—Ferry Company.—Southern Improvement & Ferry Co. has increased capital stock from \$50,000 to \$200,000.

New Orleans, La.—Clothing Factory.—Edward Kory Company has been incorporated with \$50,000 capital stock by Edward Kory, Hartwig Moss, J. W. Leech and Jacob Adler.

New Orleans, La.—Cryptograph, Type-

writers, etc.—National Cryptograph Co. has been incorporated with \$100,000 capital stock to manufacture and deal in cryptographic devices, typewriters, etc. Louis H. Fairchild is president, John Clegg vice-president and J. M. Quintero secretary-treasurer.

New Orleans, La.—Manufacturing Plant.—It is reported that the McCoy Turpentine Cup Co. will establish plant for the manufacture of galvanized turpentine cups used in extracting turpentine from trees. Mr. Vizard of the Gallican-Vizard Turpentine Co. is also interested.

New Orleans, La.—Lumber Plant.—King Lumber & Manufacturing Co. has been incorporated with \$50,000 capital stock; James R. King, president; James W. Martin, vice-president, and E. Meyer, Jr., secretary-treasurer.

New Orleans, La.—Undertaking.—People's Burial Co. incorporated with \$50,000 capital stock. Chas. de B. Calborne is president, C. L. de Fuentes vice-president, L. A. Dupont secretary and August Marchal treasurer.

New Orleans, La.—Lumber.—Interstate Lumber Co. incorporated with W. S. Day president, C. B. Brunell vice-president and Horace Brunell secretary-treasurer; capital stock \$100,000.

New Orleans, La.—Bridge Construction.—Colorado Southern, New Orleans & Pacific Railroad has begun the construction of proposed bridge across the Atchafalaya river, 1000 feet long and cost \$500,000. It is also stated that a large sum is being expended in filling in the swamp so as to make a solid roadbed. Geo. A. Clark, Beaumont, Texas, is vice-president and general manager.

New Orleans, La.—Land Improvement.—Dixie Building & Realty Co., Ltd., incorporated with \$25,000 capital stock. Fernando Escobedo is president, Nicholas J. Ciesl vice-president, John P. Blanco secretary-treasurer and Wm. Surgi general manager.

Opelousas, La.—Sawmill.—P. A. Rutledge and associates will erect band mill 50x114 feet, manufacturing hardwood lumber. About \$25,000 will be expended in building and equipment.*

Shreveport, La.—Furniture Factory.—Reported that Andrew Currie has purchased a controlling interest in the Queen City Furniture Co., recently reported as having increased capital stock from \$75,000 to \$200,000 for the enlargement of plant.

St. Martinsville, La.—Brick Plant.—Louis Greig contemplates establishing brick plant.*

MARYLAND.

Baltimore, Md.—Bottling Equipment.—The Cary Cascade Bottle Co. has been incorporated with capital stock of \$100,000 to manufacture appliances and machines for making bottle caps, seals, etc., by C. Edward May, 703 South Durham street; A. Edwin Schmidt, 701 South Ann street, and W. M. Pyle.

Baltimore, Md.—Dredging Company.—The Potomac Dredging Co. has been incorporated with capital stock of \$500,000 to conduct dredging operations by Angus Cameron, 1101 Calvert Building; Enoch Harlan, 814 Equitable Building, and Wm. H. P. Jacobs, 1602 Hanover street.

Baltimore, Md.—Electric-power Plant and Substations.—The United Railways & Electric Co., Wm. A. House, acting president, Continental Building, will erect power-house near Bay Shore Park to cost about \$100,000, and two substations, one at 708-710 West Lombard street and the other on Harford avenue, to cost \$200,000 each.

Baltimore, Md.—Sewerage Construction.—The Sewerage Commission will take bids until April 10 for following sewerage work: 23,353 lineal feet 11x12.3 feet concrete sewer, 5300 feet 8.4 feet diameter concrete sewer; 350 feet 84-inch, 730 feet 80-inch, 645 feet 76-inch and 1940 feet 74-inch circular concrete sewer; cleaning and grading disposal plant at Back river, 120 acres of land to be cleared, 428,825 cubic yards excavation, 331,150 cubic yards rolled embankment and 3500 lineal feet vitrified brick underdrain; plans and specifications obtainable on application to Sewerage Commission, Calvin W. Hendrick, chief engineer, 904 American Building.

Baltimore, Md.—Whiskey-distilling Plant.—The Wilson Distilling Co., North and Belair avenues, has been incorporated with capital stock of \$5,000,000 to distill whiskey by Herman Ellis, Jacob A. Ulman, Albert Marburg and Wm. A. Marburg.

Baltimore, Md.—Bottle-cap Factory.—The Imperial Bottle Cap & Machine Co. has leased building at 123 South street and will equip it as a factory for the manufacture of its patented bottle caps. Harry C. Primrose is general manager of the company.

Baltimore, Md.—Draughting Tools.—The Ross Combination Draughting Tool Co. has been incorporated with capital stock of \$20,000 to manufacture draughting tools by Thomas S. Ross, 1437 Hull street; Michael H. Noon, James J. Ellis, John J. Mahon and Walter R. Townsend, 225 St. Paul street.

Baltimore, Md.—Land and Improvement Company.—The Forest Park Land & Improvement Co. has been incorporated with capital stock of \$25,000 to deal in lands by Charles C. Eyer, Charles Elliott, Robert E. Lee, 611 Gaither Building, 111 North Charles street; Oscar L. Hatton, Gaither Building, and Louis J. Roth, 419 Gaither Building.

Baltimore, Md.—Stove Foundry.—A. Weiskittel & Son Chemical Co., Aliceanna and Washington streets, has been incorporated with capital stock of \$1,000,000 to manufacture stoves and all kinds of articles from iron, steel, etc., by Anton Weiskittel, Henry C. Weiskittel and John D. Heise.

Baltimore, Md.—Printing and Publishing Plant.—The Democratic Telegram Co., 21 Franklin Building, Baltimore and North streets, has been incorporated with capital stock of \$12,000 to conduct printing, publishing and newspaper business by James Young, A. S. Goldsborough, George R. Willis, E. D. Preston, J. Barry Mahool and William F. Porter.

Baltimore, Md.—Transfer Company.—Buchwald Transfer Co., German and Howard streets, has been incorporated with capital stock of \$17,000 to conduct transfer business by Wm. J. Keyes, Wm. F. Keyes, James F. Rafferty, Joseph M. Rafferty and Rodgers O. Knight.

Baltimore, Md.—Lumber.—Wehr & Edwards Lumber Co., Canton and Falls avenues, has been incorporated with capital stock of \$30,000 to deal in lumber by August Wehr, Wm. F. Wehr, Francis A. Edwards, Jr., Lawrence H. Burton and Luther M. R. Willis.

Baltimore, Md.—Engine-room.—Mt. Vernon Brewing Co., foot of Ridgely street, has awarded contract to B. W. & E. Minor, 20 Clay street, for the construction of one-story brick engine-room, 33x38 feet, at its plant at foot of Ridgely street; W. L. Minor, architect, 20 Clay street.

Baltimore, Md.—Terra-cotta Works.—Maryland Terra-cotta Co., Wicomico and Clare streets, is contemplating the increase of the capacity of its plant.

Baltimore, Md.—Stone Quarry.—The Wilkens Avenue Quarry Co. has been incorporated with capital stock of \$15,000 to operate stone quarry by John C. Leonard, Gwynn's Falls and Baltimore street; George L. Evans, Robert W. Evans, 223 Lovegrove alley; Howard E. Crook and Wm. W. Frush.

Baltimore, Md.—Steamboat Pier and Building.—The Tolchester Steamboat Co., Wm. C. Ellason, president, Pier 16 Light Street Wharf, will erect two-story freight and passenger building at the company's pier on Light Street Wharf.

Hagerstown, Md.—Silk Mill.—D. Frank Snyder Silk Ribbon Co. has reorganized and will continue operating silk mill. A. M. Evans is president.

Odenton, Md.—Car-repair Shops, etc.—Contract will be let March 11 for car-repair shop reported February 28 to be erected by the Washington, Baltimore & Annapolis Electric Railway Co. (main office, Maryland Trust Building, Baltimore, Md.); one story, 256x33 feet; reinforced concrete and brick; hot-air fan system of heating, etc.; machinery equipment not yet ready for bids, but will install a traveling crane. It is also proposed to build a substation of same general construction and an office building to be contracted for later; Roberts & Abbott Company, Maryland Trust Building, Baltimore, Md., and Cleveland, Ohio, engineers in charge.

Williamsport, Md.—Limestone Quarry.—Maryland Quarry Co., 403 Law Building, Baltimore, Md., has purchased at \$15,000 about 124 acres of limestone land near Williamsport for development. It also has acquired a lease on a small tract of land near Pinesburg, taking up a large contract to furnish the Western Maryland Railroad with ballast.

MISSISSIPPI.

Brookhaven, Miss.—Saw and Planing Mill. Central Lumber Co., recently incorporated, will operate saw and planing mill with a daily capacity of 50,000 feet; three frame buildings, 30x60 feet, 125x200 feet and 75x75 feet, will be erected. About \$50,000 will be expended; equipment not purchased. S. E. Moreton is secretary-treasurer.*

Columbia, Miss.—Lumber Plant.—Austin Lumber Co. has been incorporated with an authorized capital stock of \$150,000. The company will locate a new station on the New Orleans Great Northern Railroad in Marion county to be known as Jamestown. N. B. Noble will be president. W. H. Bundy,

Butler McClanahan and Chas. J. Welsh are also interested.

Crystal Springs, Miss.—Ice Plant.—Progressive League is promoting the establishment of a 20-ton ice plant.

Franklin County, Miss.—Timber Lands.—It is reported that W. E. Lucy and W. F. Fullington of Gadsden, Ala., have purchased about 10,000,000 feet of timber in Franklin county and will soon begin the construction of a saw and planing mill additional to saw-mill now owned.

Gulfport, Miss.—Bottling Works.—Gulfport Bottling Co. has been incorporated with \$10,000 capital stock by T. D. Tatum, A. W. Amis and others.

Houston, Miss.—Cottonseed-oil Mill.—H. A. Mullally is completing arrangements for cottonseed-oil mill reported February 14 to be erected.

McHenry, Miss.—Water-works.—Franchise granted to R. M. Bond to lay mains and pipes along the streets, furnishing the town with water; supply to be obtained from a spring near McHenry.

Meridian, Miss.—Hardware.—Bennett Bros. Hardware Co. has been chartered with \$10,000 capital stock by James Bennett, D. E. Bennett and others.

Meridian, Miss.—Gas Plant, etc.—Meridian Light & Railway Co. will expend about \$25,000 in improvements to gas plant and system of mains. It is proposed to install within the next 18 months a water-gas set with capacity of 250,000 feet daily in new building 35x50, and within next 12 months lay from three to five miles of four, six and eight-inch gas mains. A car barn 175x225 feet, of brick with steel truss ceiling for roof, will also be erected and equipped with the necessary lathes, etc., for complete car-repair shop for car bodies, trucks, motors, etc.; also to erect paint shop. Machinery will be purchased. A. B. Paterson is manager. (Referred to last week.)*

Natchez, Miss.—Lighting Plant.—Contract will be let May 1 for lighting the city for a period of 10 years from March 1, 1909. Address George T. Elsie, City Clerk, or A. C. Bearden, chairman Light and Water Committee.*

Scranton, Miss.—Cement-block Factory.—M. F. Petty will establish a cement-block factory. Machinery has been ordered.

MISSOURI.

Columbia, Mo.—Coal Mines.—Davis Watson Coal & Mining Co. has been incorporated with \$25,000 capital stock by Ben Davis, William Watson and John P. Davis.

Kansas City, Mo.—Paper-box Plant.—American Paper Box Co. has been incorporated with \$10,000 capital stock by S. M. Williams, Theo. Remley, J. M. Fitch and others.

Kansas City, Mo.—Structural-steel Works. Howard A. Fitch, C. C. Smith and M. M. Swetman have incorporated the Kansas City Structural Steel Co. with \$500,000 capital stock.

Kansas City, Mo.—Publishing.—Standard Publishing, Sale & Trading Exchange Co. has been incorporated with \$10,000 capital stock by S. C. Levenson, Joseph Levenson and A. E. Martin.

St. Louis, Mo.—Motor-car Manufacturing Plant.—Everybody's Motor Car Manufacturing Co. has been incorporated with \$50,000 capital stock by Everett A. Levy, Grafton P. Clarke and Barney Schwartz to manufacture and deal in vehicles propelled by motive power.

St. Louis, Mo.—Construction Company.—Albert B. Gaines, Jr., John H. Stutesman and Tycho L. Larsen have incorporated the Southern Construction Co. with \$10,000 capital stock.

St. Louis, Mo.—Bridge Construction.—West Side Terminal Railway Co. has incorporated with \$1,000,000 capital stock to construct bridge across the Mississippi river, previously mentioned. Temporary officers: A. D. Neff, president; C. F. Newton, vice-president, and Wm. C. Lamping, secretary-treasurer.

St. Louis, Mo.—Glue Plant.—Packers' Glue Co. has been incorporated with \$3000 capital stock by J. L. Shifflette, John F. Worman, Lamar Kleine and others to manufacture and deal in fertilizer, glue, etc.

St. Louis, Mo.—Lumber Plant.—Incorporated: Milne Lumber Co., with \$40,000 capital stock, by James Milne, Sylvester T. Mercer and W. W. Milne; offices in the Fullerton Building.

St. Louis, Mo.—Heater Manufacturing Plant.—Daws Heating & Manufacturing Co. has been incorporated with \$12,000 capital stock to manufacture and deal in hot-water heaters, etc., by Henry A. Daws, Henry A. Stemmer and Melvin I. Hoffman.

St. Louis, Mo.—Contracting and Construction Company.—Dunnivant & Burden Contracting Co. has been incorporated with \$3000 capital stock by John J. Dunnivant, William A. Burden and Rudolph J. Baumger.

NORTH CAROLINA.

Asheville, N. C.—Road Improvements.—The \$350,000 bond issue mentioned February 28 to be voted for road improvements has been defeated. M. L. Reed is chairman Board of County Commissioners.

Durham, N. C.—Knitting Mill.—W. T. Cole, J. H. Stone and A. V. Sorrell have incorporated Chatham Knitting Mills Co. with capital stock of \$50,000.

Everetts, N. C.—Brick and Tile Works.—Martha Brick & Tile Co. has been incorporated with \$20,000 capital stock by W. H. Adkins, W. S. Barnhill, J. G. Barnhill and others.

Gastonia, N. C.—Subpower Station.—Southern Power Co., Charlotte, N. C., is completing arrangements for the erection of proposed subpower station. It is proposed to erect a two-story brick transformer-house, 55x30 feet, fireproof construction; warehouse, 30x40 feet, and \$3000 residence. Contract for material has been awarded.

High Point, N. C.—Lumber Plant.—Hall Lumber Co. has been incorporated with \$60,000 authorized capital stock by Dee Allen, E. R. Briggs and F. I. Griswold.

Hope Mills, N. C.—Suspenders Factory.—J. O. Reynolds contemplates establishing suspender factory.*

Maxton, N. C.—Milling Plant.—A. D. McGirt, R. F. D. No. 2, will rebuild milling plant recently burned; equipment will be purchased.*

Piedmont, N. C.—Mining and Milling.—Piedmont Mining & Milling Co. incorporated with \$1,500,000 capital stock by Charles P. Tasker and Kendall B. Stockley, both of Philadelphia, Pa., and others.

Plymouth, N. C.—Lumber Plant.—Ayers & Martin Lumber Co. has been incorporated with \$5000 capital stock by Edgar W. Ayers, James C. Martin and L. T. Werde.

Raeford, N. C.—Lumber Plant.—Builders' Lumber Co. has been incorporated with \$25,000 authorized capital stock by M. W. New, J. W. Moore and J. R. Williamson.

Shelby, N. C.—Furniture Factory.—Ottaway Furniture Co., reported incorporated last week to manufacture furniture, will erect a two-story frame building 55x70 feet.

Smithfield, N. C.—Telephone System.—Johnston County Telephone Co. has been incorporated with \$10,000 capital stock by J. L. Le May, J. T. Lassiter and others.

South River, N. C.—Milling Plant.—South River Milling Co. has been incorporated with \$15,000 capital stock to manufacture flour, meal, grits, feedstuffs, etc.

Winston-Salem, N. C.—Furniture Factory.—Sledge Furniture Co. has been incorporated with \$30,000 capital stock by F. M. Sledge, L. A. Wade and R. F. Sledge.

SOUTH CAROLINA.

Barnwell, S. C.—Electric-light Plant.—G. B. Barnwell is reported as to install electric-light plant with capacity of 150 horse-power.

Chester, S. C.—Laundry.—Chester Steam Laundry has been incorporated with \$4000 capital stock; A. B. Caldwell, president; W. N. Sample, vice-president; J. N. Daniel, secretary-treasurer.

Hartsville, S. C.—Silverware Factory.—Eastern Carolina Silver Co. has been organized with \$10,000 capital stock. J. L. Coker is president, Walter F. Smith vice-president and C. W. Coker secretary-treasurer.

Laurens, S. C.—Cotton Mill.—Watts Cotton Mill is reported as having awarded contract to G. C. Thompson & Bros. of Birmingham, Ala., for the erection of 95-foot extension to present buildings.

Orangeburg, S. C.—Sewerage System.—Berghaus & Moffitt, Harrisburg, Pa., have contract to construct sewerage system previously mentioned.

Pendleton, S. C.—Cotton Mill.—Reported that Pendleton Cotton Mills has begun the erection of additional building and will increase its spindles from 3100 to 10,000.

Sardinia, S. C.—Causeway.—Clarendon County Commissioners will let contract March 16 for completing causeway across north prong of Black river. R. E. McFaddin, Manning, S. C., is County Supervisor.*

TENNESSEE.

Athens, Tenn.—Road Construction.—McMinn county will vote March 26 on the issuance of \$200,000 of bonds for building county roads. Address County Commissioners.

Bluff City, Tenn.—Water-power Electrical

Plant.—Holston Water, Electric & Power Co., reported incorporated February 21 to develop the water-power of the Holston river and transmit power by electricity for lighting and power purposes, has completed organization with M. L. Fowler, president; E. F. Kinzel, secretary, and R. W. Kelly, treasurer; main offices, Bristol, Va.—Tenn. Holston Mining & Manufacturing Co., also reported incorporated in issue of February 21, is a companion company of the Holston Water, Electric & Power Co.*

Bristol, Tenn.—Water-works.—City has purchased the plant, privileges and franchises of the Bristol-Goodson Water Co. at \$151,800. Plant has been operated for the past 10 months by the city under a lease. It is also proposed to issue \$300,000 of bonds authorized by the Legislature and obtain a new and more bountiful water supply from Preston Springs, five miles distant. Address The Mayor. (Referred to December 20.)

Brownsville, Tenn.—Lighting Plant, Bottling Works, etc.—Burt-Smith Company, owning and controlling the Brownsville lighting plant, bottling works, ice plant, creamery, sawmill, planing mill and other industries, has been purchased by H. L. Currie, W. S. Lea, William Thomas, Norman M. Byars, James Tipton and A. A. Sternberger.

Chattanooga, Tenn.—Sawmill.—Snodgrass & Field are completing the erection and will shortly have in operation band-saw mill, replacing plant recently destroyed by fire; daily capacity to be 40,000 feet; contracts have all been let.

Chattanooga, Tenn.—Stamping and Sealing Machine.—C. W. Gray of United States Cast Iron Pipe Co., 29 Chamberlain Building, will arrange for the manufacture of a stamping and sealing machine for envelopes (recently invented) and invites correspondence from manufacturers of small mechanical devices.*

Chattanooga, Tenn.—Repair Shops, Car Barns, etc.—Georgia Railway & Electric Co. is reported as arranging for improvements to cost several hundred thousand dollars, including repair shops, blacksmith shops, machine shop, carpenter shop, planing mill, etc., and the building of fireproof car barns in Fulton county; brick and steel construction. Thos. K. Glenn is vice-president and general manager.*

Chattanooga, Tenn.—Cotton Gin Plant.—Fuller Combing Gin Co., James T. Fuller, president, Charlotte, N. C., has about completed arrangements for locating plant, removing same from Charlotte, N. C. When completed the plant will represent an investment of \$75,000 and consist of machine and carpenter shop, paint shop, planing mill, casting house, foundry and power-house. The daily capacity at the start will be three gins, which will later be increased. All of the buildings will be of brick and of improved fireproof construction. (Reference to this project was made June 21, 1906.)

Conasauga, Tenn.—Timber Development.—Conasauga Lumber Co. has been incorporated with \$160,000 capital stock by C. H. Benedict, C. B. Benedict, M. F. Green, Walter Keith and John Byrns; company has purchased timber rights to 30,000 acres of land in Polk county and will erect sawmill.

Crab Orchard, Tenn.—Sawmill.—W. B. Coon, Dr. Aldridge and Owen Messner of Johnston City, Tenn., have installed a sawmill at Crab Orchard with a daily capacity of 35,000 feet. A lath machine is being installed and a tramroad constructed.

Dickson, Tenn.—Flour Mill.—Announcements state that C. B. Thornburg will erect flour mill.

Harms, Tenn.—Cotton Mill.—Valley Cotton & Grain Manufacturing Co. has been incorporated with a capital stock of \$75,000 by G. F. Pitts, L. E. Strong, Thomas Bagley and others. It will build cotton mill to be operated by water-power.

Harriman, Tenn.—Coal Mines.—Reported that Harry Wood has leased and will develop 400 acres of coal land on Walden's Ridge.

Johnson City, Tenn.—Knitting Mill.—Unaka Knitting Mills is reported as to increase its knitting mills from 25 to 50 and to build a dye plant. W. B. Johnson is manager.

Memphis, Tenn.—Cotton Compresses and Warehouses.—Memphis Warehouse Co. has increased capital stock from \$300,000 to \$550,000; previously reported to erect a co-operative system of cotton compresses and warehouses to cost about \$500,000.

Nashville, Tenn.—Metal-conduit Factory.—Announcements state that H. M. Conley of Minty & Conly of Sandusky, Mich., is investigating site on which to locate plant for the manufacture of conduits from corrugated galvanized metal; about \$15,000 will be invested.

Nashville, Tenn.—Printing Plant.—Keelin-

Williams Printing Co. and the B. L. Foster Company have consolidated and organized as the Folk-Keelin Printing Co.; capital stock has been increased from \$30,000 to \$40,000. Dr. E. E. Folk is president, P. M. Estes vice-president, C. A. Folk treasurer and J. N. Keelin, general manager; office, Second avenue and Union street.

Nashville, Tenn.—Car-building Shops.—Reported that the Nashville, Chattanooga & St. Louis Railway is planning for an addition to car-building department, increasing the capacity from three to ten cars daily. About \$50,000 will be expended; H. McDonald is chief engineer.

Nashville, Tenn.—Sweeping-compound Manufacturing Plant.—Dust-Avoid Manufacturing Co. has been organized with Arthur B. Ransom, president; John B. Ransom, vice-president; A. E. Baird, secretary and treasurer, and Joseph Glick, general manager, to manufacture a sweeping compound; building in West Nashville has been secured and will be equipped with necessary machinery.

Newport, Tenn.—Chair Factory.—Reported that Puryear & Bason, Mebane, N. C., will establish a \$40,000 chair factory.

Nolensville, Tenn.—Lead Mines.—Reported that Allen Gunn and associates have purchased the Gunther farm containing lead deposits and will arrange at once for development.

South Pittsburg, Tenn.—Nickel-plating Plant, etc.—Blacklock Foundry contemplates installing nickel-plating plant, also necessary machinery for grinding and finishing Mrs. Potts' irons.*

Tullahoma, Tenn.—Spoke and Hub Factory.—W. R. Campbell will rebuild that portion of hub and spoke factory recently burned, which includes engine and boiler room, 30x30 feet, and making building one story, 60x30 feet, instead of two stories. No equipment will be needed.

Tullahoma, Tenn.—Hub and Spoke Factory.—Reported that M. R. Campbell will rebuild hub and spoke factory reported burned.

Tullahoma, Tenn.—Tobacco Factory.—Arrangements are being completed for the establishment of tobacco factory. Doak Aydelott can probably give information.

TEXAS.

Alice, Texas.—Publishing.—Alice Publishing Co. has been incorporated with \$4500 capital stock by F. B. Nayer, P. A. Presnell, H. G. Luckins and others.

Angellita, Texas.—Townsite.—Angellita Townsite Co. has been incorporated with \$25,000 capital stock by W. M. Spessard and G. W. Humphries of Angellita and Sam Summerfield of Dallas, Texas.

Austin, Texas.—Dairy.—Pasteurizing Dairy Creamery Co. has been incorporated with \$15,000 capital stock by J. B. Gasser, H. A. Wroe, L. P. Wright and Hugh Williams.

Azle, Texas.—Telephone System.—Joseph Fowler, J. W. Walker, H. N. Grigsby and others have incorporated the Azle Telephone Co. with \$2000 capital stock.

Beaumont, Texas.—Oil Wells.—Sunshine Oil Co. has been incorporated with \$100,000 capital stock by Geo. W. Carroll, T. W. Garrett, J. S. Wheeler, O. W. Myers and others.

Bedias, Texas.—Hardware.—Bedias Hardware Co. incorporated with \$10,000 capital stock by B. S. Stamper, H. A. McDonald, W. W. Williamson, J. C. Griffith and others.

Brownsville, Texas.—Irrigation Canal.—La Gloria Land & Irrigation Co. has been incorporated with \$50,000 capital stock by John G. Fernandez of Brownsville, C. E. Hammond of San Antonio, Texas, and W. J. Neil, Santa Maria, Texas; company has purchased about 2000 acres of land near Brownsville and will soon begin the construction of canal.

Burlington, Texas.—Cottonseed-oil Mill, Cotton Gin, etc.—A company will be organized with G. W. Barclay, president, and W. A. Barclay of Crenshaw, Texas, vice-president, to operate cottonseed-oil mill and cotton gin with a capacity of 150 bales in 24 hours. A small refinery for private use only will be operated in connection. The expeller system will be used, and four presses and eight lifters have been purchased to begin with, intending to increase if justifiable. The seed from the gin plant will go directly into seed-house, saving handling. It is also contemplated feeding the greater portion of hulls after having ground and bolted same, so as to take the meal for export. After bolting sufficient meal is left to season the hulls. (Referred to February 21.)

Channing, Texas.—Flour Mill.—Reported that an Arkansas milling company is corresponding with E. C. Collins, president of Channing Mercantile & Banking Co., relative to establishing a flour mill.

Comanche, Texas.—Cotton Compress.—It is reported that G. A. Chilton and associates have purchased five acres of land with switch facilities and will begin at once the erection of a compress.

Comanche, Texas.—Publishing.—Incorporated: Comanche Chief Publishing Co., with \$10,000 capital stock, by E. E. Anthony, A. L. Hamilton and J. M. Presler.

Creedmoor, Texas.—Cotton Gin.—Creedmoor Gin Co. has been incorporated with \$10,000 capital stock by W. R. Davis, A. D. Dye, J. N. Sheppard, W. M. Campbell, J. E. Boothe and others.

Dallas, Texas.—Cotton-gin Machinery, etc.—Air Blast Gin Co., recently referred to, will manufacture in connection with the air-blast cotton gin mentioned cotton-handling machinery and ginning systems complete. It is not proposed to erect building until next season.

Dallas, Texas.—Brewery.—Dallas Brewing Association has had plans prepared by Louis Lehle of Chicago, Ill., for the erection of proposed addition to be used as stock mill, brewhouse and ice factory; five stories, 80x140 feet; brick, stone and steel; tar and gravel roof; gas and electricity; nickel plumbing; cost \$180,000.

Dallas, Texas.—Builders' Supplies.—Incorporated: Southwestern Builders' Supply Co., with \$30,000 capital stock, by B. L. Smith, W. H. Stratton and J. M. King.

El Paso, Texas.—Cracker Factory.—C. A. Beers Baking Co., recently organized (\$10,000 capital stock) with C. A. Beers president and treasurer, U. S. Stums vice-president and O. P. White secretary, has begun the erection of building to be equipped for the manufacture of biscuits and crackers. Structure will probably be completed within 60 days.

El Paso, Texas.—Development Company.—Chartered: Davis Development Co., with \$10,000 capital stock, by Wm. C. Davis, John M. Wyatt and Zach Lamar Cobb.

Ennis, Texas.—Sewerage System.—City will grant franchise for the installation of sewerage system. W. E. Chapman is chairman of committee.

Fort Worth, Texas.—Iron and Steel Works.—Fort Worth Iron & Steel Co. will erect a frame building 360x156 feet, with galvanized roof, and equip for the manufacture of merchant iron bars; machinery has been purchased.

Fort Worth, Texas.—Manufacturing.—The Manufacturers' Company has been incorporated with \$25,000 capital stock by Elmer Armstrong, J. C. Casler and W. B. Newkirk.

Houston, Texas.—Oil Wells.—Rex Oil Co. has been incorporated with \$5000 capital stock by C. D. Reeves, L. F. Benckenstein and Chas. F. McLeon.

Houston, Texas.—Concrete Works.—Wallis Concrete Co. has been incorporated with \$100,000 capital stock by A. M. Kellett, W. D. Majors, T. I. Wallis, T. K. Fulton and Fred Holcomb.

Houston, Texas.—Overall Factory.—Cyrus W. Scott Manufacturing Co. has been organized by Cyrus W. Scott and associates with \$50,000 capital stock; building has been secured at 311½ Travis street, which will be equipped for manufacturing trousers and overalls.

Houston, Texas.—Public Improvements.—Harris county will vote March 25 on the issuance of \$1,000,000 of bonds, \$500,000 to be used in erecting courthouse and \$500,000 for roads and drainage. A. E. Amerman is County Judge.

Houston, Texas.—Rice Mill, Elevator, etc.—Pritchard Rice Milling Co. has been chartered with Jonathan Lane, president, and Paul E. Pritchard, secretary-treasurer, to operate rice mill with a daily capacity of 3000 bags and elevator with a capacity of 50,000 bags, and warehouse. The mill building will be of brick, four stories, 65x70 feet; elevator 114 feet high, 60x70 feet, and warehouse 125x200 feet; plans for buildings drawn by Hayes & Jones.

Kirbyville, Texas.—Oil Wells.—Chartered: Sabine Oil Co., with \$250,000 capital stock, by W. J. B. Brewton, Samuel T. Coats, Jasper C. Williamson, B. Brewton and J. S. Cochran.

Lund, Texas.—Cotton Gin.—Lund Gin Co. has been incorporated with \$3000 capital stock by Gus O. Zaholm, Fred Bergman, Emil Gustafson, C. W. Forsdahl and Ludwig Kyleburg.

Madisonville, Texas.—Cottonseed-oil Mill.—E. B. Seay is reported as arranging for the establishment of a 40-ton cottonseed-oil mill.

Mexia, Texas.—Sawmill.—Daniel Dick is reported to establish sawmill near Williams Crossing in Limestone county.

New Birmingham, Texas.—Cotton-gin Machinery.—Woodbridge Gin Co., reported in-

incorporated February 21 with \$40,000 capital stock, will manufacture gin machinery. For the present the company will rent a building; later it is proposed to erect building and increase capacity. T. J. Sheppard is president.

Rockport, Texas.—Ice and Light Plant.—Rockport Ice & Light Co. has been incorporated with \$25,000 capital stock by Charles G. Johnson, D. R. Schrivner and H. H. Ellis.

San Antonio, Texas.—Park Company.—Wonderland Park Co. has been incorporated with \$100,000 capital stock by Geo. C. Saur, Thomas H. Gray, Max B. Mayer, S. F. Jacobi and others.

San Antonio, Texas.—Macaroni Factory.—Announcements state that the San Antonio Paste Works will erect modern macaroni factory.

San Antonio, Texas.—Bottling Works.—Coco-Cola Bottling Co. has been incorporated with \$30,000 capital stock by S. J. Newcomb, M. A. Krueger and George Howland.

San Antonio, Texas.—Land Company.—Mexican Land Co. has been incorporated with Winchester Kelson, president; C. W. Ogden and O. S. Newell, vice-presidents; Walter Napier, secretary, and S. J. Brooks, treasurer, to deal in land in Texas and Mexico.

Sulphur Springs, Texas.—Cotton Mill.—Britton Bros. of Dallas, Texas, have submitted a proposition to establish a cotton mill to be capitalized at \$125,000.

Taylor, Texas.—Sewerage System.—J. F. Hamilton of the Hamilton Construction Co., Chicago, Ill., has contract at \$35,000 for constructing proposed sewerage system, which will include septic tanks, filtering beds, disposal plant, four acres of land and seven miles of vitrified pipe. Taylor Sanitary Construction Co. will be incorporated to operate plant.

Texarkana, Texas.—Cooperage Plant.—Gulf Cooperage Co. has been incorporated with \$200,000 capital stock by F. C. Proctor and D. E. Greer of Beaumont, Texas; W. L. Mellon and C. F. Farren of Pittsburg, Pa., and George H. Taber of Edgewood, Pa.

Uvalde, Texas.—Telephone System.—J. L. Jackson, J. P. Jones, L. A. Field, J. W. Newman and S. S. Field have incorporated the Uvalde, Del Rio & San Antonio Telephone Co. with \$30,000 capital stock.

Temple, Texas.—Gin Feed and Cleaner Manufacturing Plant.—M. E. Norris will establish plant for the manufacture of an improved gin feeder and cleaner.

Waco, Texas.—Parks and Bridges.—City will vote April 9 on the issuance of \$50,000 of bonds for parks and \$20,000 of bonds for permanent bridges. Address The Mayor.

Waco, Texas.—Compound-lard Plant.—Brazos Packing Co., reported last week as arranging for the installation of plant to manufacture compound lard, will erect two-story building 25x30 feet; about \$5000 will be expended. Thomas I. Luckett is president and manager.

Weaver, Texas.—Telephone System.—Weaver Telephone Co. has been incorporated with \$12,000 capital stock by H. B. Davidson, A. W. Sparks, Jr., and S. T. King.

Winters, Texas.—Telephone System.—Winters Independent Telephone Co. has been incorporated with \$10,000 capital stock by F. L. Pierce, R. A. David, L. A. David, J. L. Alford and M. J. Sanders.

VIRGINIA.

Azen, Va.—Lumber Plant.—Hassinger Lumber Co., which has established a lumber town in the White Top mountains, will shortly begin the operation of its proposed plant, consisting of a double band-saw mill of 50,000 feet capacity, for developing its extensive timber tract extending for six miles along the railroad from Taylor's Valley to Azen.

Brookneal, Va.—Water-power Electrical Plant.—Reported that E. R. Monroe and associates will soon organize proposed company for the development of water-power on the Staunton river near Brookneal, transmitting same by electricity. About \$400,000, it is estimated, will be expended.

Hampton, Va.—Pumping Station.—Bids will be received for erection of brick building for pumping station for Peninsula Pure Water Co. at Big Bethel, Va. Plans and specifications can be obtained from E. A. Smith, resident engineer, P. O. Box 316, Hampton, Va. Bids to be forwarded to office of Peninsula Pure Water Co., 18 South King street, not later than March 15 and be marked "Proposal for Erection of Pumping Station at Big Bethel, Va.;" usual rights reserved; Wm. H. Boardman, civil, sanitary and hydraulic engineer, 426 Walnut street, Philadelphia, Pa.

Montgomery County, Va.—Coal Mines.—It is reported that Northern capitalists have

purchased a controlling interest in the Virginia Anthracite Coal Co. of Richmond, Va., operating mines in Montgomery county, and will continue the development of properties.

Newport News, Va.—Street Improvements.—City has voted affirmatively the \$100,000 bond issue for street improvements reported February 21. J. L. Marye is City Engineer.

Newport News, Va.—Brewery, etc.—Old Dominion Brewing & Ice Co. incorporated with \$700,000 authorized capital stock by S. Swett of New York, N. Y., J. K. Coras and A. D. Jones, both of Newport News. (Mr. Swett and associates were reported last week as having purchased the plant of the Old Dominion Brewing & Ice Co.)

Norfolk, Va.—Publishing.—Chartered: Visitors' Publishing Corporation, with H. I. Brittan president and treasurer and J. McWebb secretary; authorized capital stock \$10,000.

Norfolk, Va.—Amusement Company.—Norfolk Spectacular Corporation chartered with \$100,000 authorized capital stock. J. E. Prince is president, S. C. Davidson secretary and J. W. Cashin treasurer.

Norfolk, Va.—Marine Railway.—Bott & Lewis Railway Co., Berkley, Va., has purchased site in Brambleton Ward on which to erect modern railway plant.

Pennington Gap, Va.—Coal Mines.—Black Mountain Colliery Co., J. M. Barr, Norfolk, Va., president, is reported as having completed the purchase of a controlling interest in the Virginia-Lee Company, which is developing some 1500 acres of coal land at Pennington Gap. This will place the company in control of 3500 acres of coal land. William Ramsay, manager, will be in charge of the development work. Main offices will be located in Bristol, Va.-Tenn.

Norfolk, Va.—Bottling Works.—Hayo-Cola Company has been incorporated with an authorized capital stock of \$25,000. E. S. White is president and I. S. D. Sauls secretary.

Norfolk, Va.—Quarry and Mining Company.—Church Quarry and Mining Corporation has been chartered with an authorized capital stock of \$25,000. E. B. Johnson is president and treasurer, E. W. Church vice-president and general manager and T. M. Johnston secretary.

Norfolk, Va.—Waste-paper Receptacle Plant.—Southern Waste Paper Receptacle Co. has been incorporated with \$10,000 capital stock to manufacture waste-paper receptacles; T. S. Garnett, Jr., president, and A. E. Campe, vice-president.

Portsmouth, Va.—Bakery.—W. B. Colonna has contract to erect one-story building for Miss Jeanette Guthrie; cost \$2000; building to be occupied by J. M. Wilson as bakery.

Roanoke, Va.—Light, Heat and Power Plant.—Roanoke Light, Heat & Power Co. has been incorporated with \$500,000 capital stock. James P. Woods is president, James C. Martin vice-president, H. T. Hall secretary and treasurer.

Sewell's Point, Va.—Shoe Factory.—James-town Exposition Shoe Manufacturing Co. incorporated with \$15,000 authorized capital stock. C. J. Green of Richmond, Va., is president.

South Quay, Va.—Bridge.—Roanoke Bridge Co. has contract at \$9000 for building steel bridge over the Blackwater river at South Quay between Southampton and Nansemond counties; 150 feet long, with draw of about 60 feet. Paul C. Everett, Suffolk, Va., is Supervisor of Nansemond county. (Previously reported.)

Williamsburg, Va.—Knitting Mill.—Williamsburg Knitting Mills is reported as to build a 16x85-foot addition and to install new spinning machinery, which has been contracted for.

Wytheville, Va.—Printing Plant.—D. A. St. Clair will expend \$7000 in repairing printing plant recently damaged by fire.

WEST VIRGINIA.

Charleston, W. Va.—Sewerage.—C. T. McCracken, Columbus, Ohio, has submitted a bid of \$174,032.40 without time and \$180,282.40 with time for constructing sewerage system referred to January 24, and will be awarded contract as soon as special ordinance required is passed. W. A. Hogue is City Engineer.

Charleston, W. Va.—Printing Plant.—Crossman Printing Co. has been incorporated with an authorized capital stock of \$30,000 by Geo. H. Shrewsbury, S. C. H. Butler, R. B. Crossman, H. S. Mathews and others.

Greenbrier, W. Va.—Ice and Cold-storage Plant.—Greenbrier Valley Cold Storage Co. has increased capital stock from \$50,000 to \$100,000. Company is reported to increase capacity of ice plant from 10 to 50 tons daily.

Follansbee, W. Va.—Glass Works.—Jefferson Glass Co. has been incorporated with an

authorized capital stock of \$100,000 by H. G. Lohmon of Wheeling, W. Va., D. J. Sinclair, A. G. Frohne, A. G. Lee and James Porter of Steubenville, Ohio.

Green Sulphur Springs, W. Va.—Telephone System.—Green Sulphur Mutual Telephone Co. has been organized with \$5000 capital stock by John L. George, J. M. Kirk, J. S. Zickafoose, G. W. Allen and others.

Huntington, W. Va.—Road and Bridge Construction.—Cabell county will vote April 20 on the issuance of \$240,000 of bonds for the maintenance and building of county roads and bridges. Address County Clerk.

Lumberport, W. Va.—Coal Mines.—Hero Coal & Coke Co. has been incorporated with \$10,000 capital stock by H. P. Gilmore, Fairmont, W. Va.; A. D. F. Boyd, Jr., C. S. Bowman, F. R. Boyd, J. H. Field and others, all of Uniontown, Pa.

Morgantown, W. Va.—Plumbing and Supplies.—Standard Plumbing & Supply Co. has been incorporated with \$5000 capital stock by John Watts, Martha E. Watts, Lebeus L. Bartholow, Geo. E. Bartholow and others.

Parkersburg, W. Va.—Sewerage.—Board of Affairs will arrange at once to advertise for bids for building a storm-water sewer draining the fifth, sixth, seventh and eighth wards; \$5000 is available.

Pennsboro, W. Va.—Oil Wells.—Knox Oil Co. has been incorporated with \$50,000 capital stock by C. H. Heflin, W. R. Meservie, H. J. Scott, I. L. Fordyce and J. W. Grinnan.

Webster Springs, W. Va.—Electric-light Plant.—People's Electric Light & Coal Co. has been incorporated with \$15,000 authorized capital stock by Harry E. Gump, A. B. Elbon, E. F. Benedum, A. C. Johnson and T. M. Hicks.

Wheeling, W. Va.—Pumping Plant.—City is considering the installation of a new pump of about 20,000,000 gallons capacity and a filtration and sedimentation plant at the water-works near Slacktown. An election will probably be held to vote on the issuance of \$300,000 of bonds for the improvements.

INDIAN TERRITORY.

Afton, I. T.—Water-power Electrical Plant.—Cherokee Power Co. has incorporated with \$1,000,000 capital stock to develop water-power on river near Afton, building power plant and transmitting the electricity obtained for light and power purposes within a radius of 25 miles.

Chickasha, I. T.—Railroad-repair Shops.—Reported that the Chicago, Rock Island & Pacific Railway is considering enlarging shop and erecting depot. H. U. Mudge, Chicago, Ill., is second vice-president.

Chickasha, I. T.—Water-power Electrical Plant.—City has granted franchise to Dennis O'Brian of Chickasha and Louis E. Wetling of Lincoln, Neb., for the construction of electric-light plant, carrying contract for 25 street lights. Messrs. O'Brian and Wetling have organized company for the development of the waters of the Washita river, constructing dam and building plant for the transmission of power to Chickasha for lighting and power purposes. Construction work will begin at once and machinery has been purchased. It is estimated that about \$100,000 will be expended.

Hugo, I. T.—Railroad Repair Shops.—Construction work is reported as begun on repair shops for the St. Louis & San Francisco Railroad, J. F. Hinckley, St. Louis, Mo., chief engineer, and include a machine shop 45x100 feet, carpenter shop 80x300 feet and blacksmith shop 40x80 feet; buildings constructed of brick; machinery to be operated by air compressor. About \$200,000, it is estimated, will be expended.

OKLAHOMA TERRITORY.

Altona (not a postoffice), O. T.—Telephone System.—Incorporated: Altona Telephone Co., with \$3000 capital stock, by Harvey Utterback of Kingfisher, O. T.; Claus Rohner, John Robinson and J. M. Sanders of Omega, O. T.

Billings, O. T.—Cotton Gin.—Marshall, Pearson & Hayton of Marshall, O. T., are reported as to erect cotton gin.

Butler, O. T.—Cotton Gin.—Butler Gin Co. has been incorporated with \$5000 capital stock by H. Henigan, D. T. Barton and B. L. Fudge.

Glencoe, O. T.—Cotton Gin.—Farmers' Union has let contract for four-stand cotton gin costing about \$16,000, and has organized a company with J. L. Matthews, president; J. W. Hesser, vice-president, and A. H. Shell, secretary.

Gotebo, O. T.—Brick Plant.—Gotebo Brick Co. is expending several thousand dollars in

installing gas-drilling machinery and making other improvements to plant, opening new shale beds, etc.

Hydro, O. T.—Telephone System.—Deer Creek Telephone Co. has been incorporated by Ira Smith, J. P. Janzen and Adam Keller.

Hobart, O. T.—Sewerage.—City will vote on the issuance of bonds for the installation of storm sewers. Address The Mayor.

Lawton, O. T.—Corn Mill, Elevator, etc.—J. G. Crawford is erecting a \$35,000 corn mill and elevator. Grist mill and other adjuncts will be added, making a total expenditure of about \$70,000.

Maud, O. T.—Cottonseed-oil Mill.—J. M. Aydelotte, Shawnee, O. T., states there is no truth in the report mentioned last week that he and associates will erect \$125,000 cottonseed-oil mill.

Oklahoma City, O. T.—Development Company.—East Oklahoma City Development Co. incorporated with \$200,000 capital stock by Thomas Campbell, William R. Swarthout and L. A. Swarthout.

Oklahoma City, O. T.—Park.—Guernsey Park Co. incorporated with \$50,000 capital stock by Guy E. Blackwelder, M. L. Blackwelder, Robert Chowning and associates.

Oklahoma City, O. T.—Piano Factory.—Lee F. Mott Piano Manufacturing Co. has been incorporated with \$300,000 capital stock by H. C. Pickett, A. J. Kirkpatrick, R. Wells Knisely, Lee F. and Horace Mott.

Pawnee, O. T.—Oil Wells.—Salina Oil Co. of Pawnee and Tulsa, I. T., has been incorporated with \$40,000 capital stock by Frank Shoemaker of Pawnee, John G. Miller and J. W. Woodford of Tulsa.

Marshall, O. T.—Cotton Gin.—It is stated that Marshall, Pearson & Hayton are preparing to build a modern two-story ginning plant at Marshall.

Shawnee, O. T.—Cotton Mill.—It is reported that Geo. Warren of Boston, Mass., has submitted a proposition for the organization of a company with a capital stock of \$300,000 to build cotton mill.

Shawnee, O. T.—Cotton Mill.—An unconfirmed report states that Avalard Howard of Stafford Springs, Conn., and two New England capitalists propose building a \$250,000 cotton mill at Shawnee.

Snyder, O. T.—Water-works.—City has voted affirmatively the issuance of \$30,000 of bonds for water-works (referred to January 24).

Wakita, O. T.—Mining Company.—Highland Mary Mining Co. has been incorporated with \$1,000,000 capital stock by Stanford Rowe, E. B. Miller and Louis Biser.

Weatherford, O. T.—Oil and Gas Wells.—Chartered: Weatherford Oil & Gas Co., with \$250,000 capital stock, by J. J. Williams, C. F. Boyer, G. Stettler, M. C. Barnett and others.

Yale, O. T.—Telephone System.—Yale Telephone Co. has been incorporated with \$25,000 capital stock by West Keeler, Thaddeus, Wilbur and Selden J. Spencer.

BURNED.

Atlanta, Ga.—Albert E. Thornton's residence; total loss \$40,000.

Atlanta, Ga.—Peck-Dunn Manufacturing Co.'s plant and the Sullivan Furniture Co.'s plant.

Brewton, Miss.—Flurry & Manning's mill; loss \$4000.

Coldwater, Miss.—Coldwater Cotton Oil Co.'s plant; loss \$50,000.

Conway, Ark.—J. E. Little's gin and mill.

Dossett, Tenn.—Rand Powder Co.'s mixing mill.

Easton, Md.—Grover C. Cooper's shirt factory; loss about \$2500; building owned by Robert L. Kemp.

Grafton, W. Va.—Southside Planing Mill Co.'s plant.

Jacksboro, Texas.—Hensley Bros.' ice and electric-light plant; loss \$10,000.

Jackson, Miss.—Buckeye Cotton Oil Mill Co.'s seedhouse; total loss about \$55,000.

Morgan City, La.—George Vinson Shingle & Manufacturing Co.'s shingle mill; loss \$12,000.

Nashville, Tenn.—Journey & McCombs' slat factory; loss \$4000.

San Antonio, Texas.—Depot used jointly by the Southern Pacific and the Missouri, Kansas & Texas Railway; loss about \$150,000. S. B. Fisher, St. Louis, Mo., is chief engineer of the Missouri, Kansas & Texas Railway.

Sycamore, Texas.—Branch Bros.' gin; loss \$3200.

Talladega, Ala.—Talladega Oil Mill damaged; loss \$15,000.

Tampa, Fla.—Jetton-Dekle Lumber Co.'s sash, door and blind factory; loss \$80,000.

Tullahoma, Tenn.—M. R. Campbell's hub and spoke factory partially destroyed; loss about \$30,000.

Washington, D. C.—Harvard Laundry Co.'s plant, 731 9th street N. W.; loss \$21,000.

BUILDING NOTES.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Abbeville, S. C.—Courthouse.—Edwards & Walter, Columbia, S. C., have been commissioned to prepare plans for proposed \$50,000 courthouse for Abbeville county.

Alexandria, La.—City Hall.—City has voted affirmatively the \$30,000 bond issue referred to January 17 for the erection of City Hall. A two-story building 60x80 feet will be erected at a cost of \$60,000. W. B. Turner is Mayor.

Alexandria, La.—Building.—A. B. Hundley, Columbia, La., will erect two-story brick building; cost \$3000.

Americus, Ga.—Association Building.—The erection of a \$40,000 Y. M. C. A. building is reported as under consideration. Address The Secretary.

Ashburn, Ga.—Courthouse.—Turner county is reported to shortly advertise for bids for \$40,000 courthouse. Address The Ordinary.

Ashdown, Ark.—Courthouse.—Bids will be asked at once for erecting proposed courthouse for Little River county. T. J. Lott is chairman of commission.

Asheville, N. C.—Postoffice and Courthouse. James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., will receive bids until April 11 for constructing (complete) the extension to the United States postoffice and courthouse in accordance with drawings and specifications, copies of which may be had at office of supervising architect or at the office of the custodian of the building at Asheville at the discretion of the supervising architect.

Atlanta, Ga.—Prison.—Work will soon begin on improvements to be made to the Atlanta federal prison, for which \$100,000 is now available. Between \$300,000 and \$400,000 will be required to complete all the work contemplated. W. H. Moyer is warden.

Atlanta, Ga.—Auditorium and Armory.—Morgan & Dillon have been commissioned to prepare plans for auditorium and armory to be erected by the Atlanta Auditorium-Armory Co. A fireproof building, 200x300 feet, to cost \$200,000, was reported February 21 to be erected.

Augusta, Ga.—Church.—A. J. Little has contract to erect proposed edifice for Second Baptist Church.

Baltimore, Md.—Apartment-house.—John J. Carlin of the Russell Construction Co., Clifton avenue and 8th street, Walbrook, will erect seven or eight-story apartment-house on Chestnut near 12th street, Walbrook. The building will be erected by the Russell Construction Co.

Baltimore, Md.—Bowling Alley and Assembly Hall.—The P. E. Church of the Ascension, Robert S. Coupland, pastor, 327 North Arlington avenue, has commissioned John Freund, Jr., architect, Vansant Building, 210 East Lexington street, to prepare plans and specifications for building bowling alleys and assembly hall; two stories, 21x36 feet; brick with stone trimmings; electric wiring and fixtures; sanitary plumbing; heating system.

Baltimore, Md.—Store Building.—N. B. Lobe, 307 West Baltimore street, will make extensive alterations and additions to store buildings at 1016 and 1018 East Baltimore street, converting them into one building; John Freund, Jr., architect, Vansant Building, 210 East Lexington street.

Baltimore, Md.—Dwelling.—John C. Legg, Chamber of Commerce Building, Water and Commerce streets, has awarded contract to McLaughlin Bros., 100 East Lexington street, for the construction of dwelling at Roland Park; three stories, 36x52 feet; brick with stone trimmings; electric wiring and fixtures; sanitary plumbing; heating system; cost about \$15,000; Price & McLanahan, architects, 1624 Walnut street, Philadelphia, Pa.

Baltimore, Md.—Apartment-house.—Lewis and Jacob Cohen have commissioned Jacob F. Gerwig, architect, Hoffman Building, 11 East Lexington street, to prepare plans and specifications for the construction of three-story frame apartment-house with modern conveniences at corner Belvidere and Park Heights avenues.

Baltimore, Md.—Dwellings.—Oliver H. Reese, 174 West Cross street, has awarded contract to Louis E. Brown, 1712 West Frank-

lin street, for the construction of 20 two-story brick dwellings on Herbert street between Payson and Monroe streets, to cost \$22,000.

Baltimore, Md.—Dwelling.—Wm. R. Griffith, 2427 North Calvert street, has commissioned Tormey & Leach, architects, 323 North Charles street, to prepare plans and specifications for two-and-one-half-story dwelling at Tuxedo Park.

Baltimore, Md.—Dwelling.—Referring to dwelling to be erected for William Bauernschmidt, 2808 St. Paul street, at corner St. Paul street and Merryman avenue, the following contractors are estimating on construction: W. E. Burnham, Union Trust Building; John Cowan, 106 West Madison street; Gladfelter & Chambers, 2072 Woodberry avenue; Willard E. Harn, 2700 Huntington avenue, and Arthur F. West, 217 South Gilmor street; three stories; brick with stone trimmings; modern conveniences; bids to be in March 12; Elliott & Emmart, architects, Union Trust Building, Charles and Lexington streets.

Beaumont, Texas.—Building.—J. B. Brechin is preparing plans for building to be erected by H. A. Perlstein; five stories; 60x112 feet; ordinary construction; steam heat; gas and electric fixtures; two passenger and one freight elevator; cost \$15,000.

Beville, Texas.—Business Building.—H. F. Otto will arrange for the erection of brick business building.

Bowling Green, Ky.—Hotel.—Proposals will be received March 8 at the office of J. Friedlander, architect, for improvements to be made to the Morehead House for Carl Herdman; plans and specifications on file at office of the architect. Certified check for \$400 must accompany each bid for general contract and heating and plumbing; usual rights reserved.

Bessemer, Ala.—Opera-house.—J. F. Gallagher, W. E. Bens, W. F. Taylor and J. D. O'Hara are organizing stock company to erect \$35,000 opera-house after plans by W. E. Bens. Bids will be opened about April 1. Electric lights will be installed. (Referred to last week.)

Birmingham, Ala.—Church.—Architects are invited to submit plans for edifice reported recently to be erected by Simpson M. E. Church, H. R. Osborne, pastor; structure to be 70x100 feet; stone veneer walls; cost \$50,000; furnaces, electric and gas fixtures included in equipment.*

Birmingham, Ala.—Fire Station.—Julian Kendrick, City Engineer, will open bids March 9 for constructing fire station in accordance with plans and specifications on file in City Engineer's office; usual rights reserved.

Brookneal, Va.—Tobacco Barns.—Incorporated: Brookneal Land & Development Co., with \$20,000 capital stock, to build tobacco barns, etc. W. W. Williams is president, E. R. Monroe vice-president.

Camden, S. C.—Church.—Bids are being received for the erection of edifice for Baptist Church; plans and specifications on file with L. A. Mitchell and W. R. Eve, Jr., chairman and secretary of committee, respectively.

Channing, Texas.—School Building.—O. G. Roquemore, Amarillo, Texas, will prepare plans for proposed school building.

Chase, Md.—Town Hall.—Chase Town Hall Association has been incorporated with \$5000 capital stock by Nicholas Lay, Wm. G. Earl, S. Wm. Ulrich, Edward J. Meeks and associates to build town hall.

Charleston, W. Va.—Bank Building.—A. B. Mullett & Co., 1411 F street N. W., Washington, D. C., is preparing plans for building to be erected by Farmers & Merchants' Deposit Co.; one story; 46x46 feet; brick and stone; combination lighting fixtures; plumbing; steam heat; fireproof vaults.

Charlotte, N. C.—Warehouse.—A. F. Gallivan Company, Greenville, S. C., is contractor for building reported February 14 to be erected by the General Fire Extinguisher Co. (main office, Providence, R. I.); one story, 150x300 feet. J. W. Conway is manager of Southern department, with offices at Charlotte.

Chatham, Va.—School Building.—C. H. Turner & Co., Evinston, Va., have contract to erect high-school building, to be constructed of hard brick, heated by furnace and cost about \$6000.

Chattanooga, Tenn.—Apartment-house.—W. B. Swaney and Thomas H. Cooke will erect apartment-house costing \$35,000; four stories, 60x114 feet, equipped with steam heat, hot and cold water, elevators, and wired throughout for telephone service.

Chickasha, I. T.—Hotel and Opera-house.—W. T. Creslin has had plans prepared for erection of a five-story hotel and opera-house, 100x165 feet, to cost \$200,000.

Chillicothe, Texas.—Buildings.—J. H. and T. B. Nuckles will erect three one-story brick buildings.

Clinton, Miss.—Dining-hall and Dormitory. R. H. Hunt, Chattanooga, Tenn., has completed plans for dining-hall 75x105 feet, to cost \$5000, and boys' dormitory, three stories, of brick, to cost \$30,000, at the Mississippi College. Bids will be asked shortly for construction of buildings.

Columbia, S. C.—Store Building.—McCreery Land & Investment Co. contemplates erecting a \$32,000 veneered brick building 75x100 feet.

Columbia, S. C.—Statehouse.—Bids will be received until April 4 by the Commission for Completing Statehouse for new structural-steel supports and repairing metal ceiling. Plans and specifications may be had on application to Chas. C. Wilson, architect, 1302 Main street, Columbia, S. C.; usual rights reserved.

Columbus, Miss.—Bank and Office Building. Bids will be opened March 20 at office of Columbus Insurance & Banking Co. for the erection of six-story bank and office building. Plans and specifications on file at company's office, also at office of R. H. Hunt, architect, Chattanooga, Tenn. Bids can be made on the whole, or heating, plumbing and wiring can be let in separate contract; T. B. Franklin, president.

Columbus, Miss.—Hotel.—Sherrod & Sheffield are planning a 20-room addition to the Stone Hotel.

Comanche, I. T.—Hotel.—J. F. Waymire, mentioned February 14 as erecting hotel, will build a two-story brick structure 44x64 feet; cost \$7500; electric fixtures, tram elevators, stoves for heating, etc.

Corpus Christi, Texas.—Business Building.—V. M. Doonigan of Brookshire, Texas, will erect three-story business building.

Corpus Christi, Texas.—Business Building.—Gugenheimer & Cohn will erect three-story cement business building.

Corpus Christi, Texas.—Business Building.—F. A. Mabey, Dallas, Texas, will erect three-story business building.

Crowley, La.—School Building.—Plans by R. A. Nockton have been approved and bids will be opened April 2 for school building to be erected in South Crowley; two stories, 56x40 feet; cost about \$14,000.

Cuero, Texas.—Business Building.—Allert & Fuess have contract to erect \$30,000 brick building for H. Runge & Co.

Cumberland, Md.—Theater.—Maryland Theater Co. has been incorporated with \$75,000 capital stock by Thomas Footer, Harry Footer, Samuel Wertheimer, Henry J. Gillick and others of Cumberland and Edgar K. Frank of Pittsburgh, Pa., to erect theater on site 103x175 feet. Plans will be prepared by John D. Allen of Philadelphia, Pa.

Decatur, Ala.—Warehouse.—Farmers' Union Warehouse & Storage Co. has been incorporated with \$7000 capital stock by W. B. Simmons, J. H. Blevins, M. J. Livingston, N. D. Garrison and others.

DeFuniak Springs, Fla.—School Building.—Town will issue \$10,000 of bonds for school building. Plans and specifications have not been prepared. D. S. Gillis is Town Clerk.

De Witt, Ark.—Jail Building.—Arkansas county contemplates the erection of \$15,000 jail building. Address County Judge Shannon.

Dublin, Texas.—Business Building.—V. M. Utterback will erect a two-story stone business building 80x100 feet.

Eagle Lake, Texas.—Bank Building.—The building to be erected by the Eagle Lake State Bank, for which contract was reported February 21 as being let to G. M. Jackson, will be one story, of brick, with tile floor and metal ceiling; electric fixtures; cost \$5200. Sanguinet & Staats, Houston, Texas, prepared the plans.*

Earrington, Ky.—Bank Building.—People's Bank, recently organized, is having plans prepared by Harris & Shopbell, Evansville, Ind., for a three-story brick-and-stone building 20x60 feet; steam heat; electric fixtures; cost \$4000. (Referred to February 28.)

Earrington, Ky.—Office Building.—Ruby Lumber Co., Madisonville, Ky., is having plans prepared by Evans & Shopbell of Evansville, Ind., for building for offices and storeroom.

Echo, La.—Warehouse.—Echo Farmers' Union Warehouse Co. has been organized to erect warehouse with a capacity of 1500 bales. I. J. Simmons is president and George A. Odom secretary-treasurer.

Elizabeth City, N. C.—Hotel.—Reported that company is being organized with an authorized capital stock of \$50,000 to erect proposed Nags Head Hotel. Plans have been prepared by Architect Land.

Elizabethtown, Ky.—Opera House.—Reports state that Walker Stewart is organizing a stock company to erect opera house 60x80 feet, construction work to begin about March 15.

El Paso, Texas.—Building.—Reported that Anson Mills will erect a 10-story structure.

El Paso, Texas.—Building.—Reports state that Felix Martinez, Silber Bros. and A. Schwartz have purchased the Plaza Block site at \$16,000 and will erect a 10-story building.

Ensley, Ala.—Residence.—Construction work has begun on residence for Chas. F. Camp to cost between \$5000 and \$6000. F. M. Slye is contractor.

Fairmont, W. Va.—Association Building.—Brady Construction Co. of Parkersburg, W. Va., has contract to erect Y. M. C. A. Building; total cost about \$90,000. Company will probably receive contracts for plumbing and wiring.

Fitzgerald, Ga.—Bank Building.—Exchange National Bank has purchased site at \$15,000 on which to erect building.

Fort Smith, Ark.—Office Building.—Allan Kennedy & Co. will erect four-story building with pressed-brick front.

Fort Worth, Texas.—Residence.—William Reeves will erect two-story-and-basement brick residence; cost \$18,000.

Fort Worth, Texas.—Store Building.—S. A. Tomlinson has contract to erect store building for F. M. Long after plans by Sanguinet & Staats, Hoxie Building, Fort Worth; 50x95 feet; five stories and basement; arc lights; electric freight elevators; cost \$35,000; contract for plumbing awarded to Kane Company, and for electric wiring to A. J. Anderson Company.

Gadsden, Ala.—School Building.—James McDonald has contract at \$12,775 to erect school building, for which plans by A. Duncan Simpson were recently mentioned as adopted; 85x70 feet; ordinary construction.

Grand Coteau, La.—College Buildings.—Announcements state that the Jesuit Order will rebuild St. Charles College, destroyed by fire several years ago; buildings to be of brick. Rev. Father Mattern is president of the college.

Greenville, S. C.—Hotel.—Greenville Hotel Co. has been incorporated with \$50,000 capital stock by F. F. Capers, A. B. Carpenter, A. G. Furman, C. O. Allen and C. E. Graham. A hotel costing between \$125,000 and \$150,000 will probably be erected.

Hawkinsville, Ga.—City Hall and Auditorium.—Bids will be received until March 18 at office of C. W. Harris, City Clerk, in whole or in part, for city hall and auditorium; contractors bidding in full must accompany bid with certified check for \$500, payable to city. Plans and specifications on file at City Clerk's office; also at office of W. R. Gunn, architect, 155½ Cotton avenue, Macon, Ga.; usual rights reserved. P. H. Lovejoy is Mayor. (Bids were recently reported to be opened March 4.)

Hinton, W. Va.—School Building.—West Virginia Architects & Builders' Association, Huntington, W. Va., has contract at \$18,800 to erect proposed high-school building. American Warming & Ventilating Co., Pittsburg, Pa., has contract for heating, plumbing and ventilating.

Houston, Texas.—Courthouse.—Harris county will vote March 25 on a bond issue, \$500,000 of which will be used in constructing courthouse. A. E. Ackerman, County Judge. (See Construction item under Houston, Texas.)

Jacksonville, Fla.—Terminal Buildings.—D. W. Lum, Washington, D. C., is preparing plans for terminal buildings to be erected by the St. Johns River Terminal Co., which include a brick building 60x420 feet; mill construction; electric arc and incandescent lights. Plans have not been complete as yet for office part, which will be three stories, 90x60 feet and will probably contain an electric elevator. About \$50,000 will be expended.

Kansas City, Mo.—Hospital.—Plans have been prepared by Walter U. Love for a three-story brick hospital for children on site of Mercy Hospital. William W. Taylor will superintend the construction; cost about \$20,000.

Kansas City, Mo.—Terminals.—Kansas City Terminal Railway Co., John M. Egan, president, referred to at various times in this department in connection with the erection of union passenger station, proposes, in addition to the work already proposed, the building of 11 additional subways and viaducts to be constructed at any time required by city, lowering Troost avenue and Charlotte street, constructing roadway on south side of Belt line, five union freight stations, etc.

Keyser, W. Va.—Building.—H. G. Steorts was erroneously reported February 28 as hav-

ing contract for the erection of Government building. Mr. Steorts has contract to erect a three-story brick building, a portion of which will be used as postoffice.

Laredo, Texas.—Courthouse.—Plans by Alfred Giles, San Antonio, Texas, have been adopted for Webb county courthouse, previously referred to; cost \$45,000.

Lawton, O. T.—Building.—W. H. Quinette has contract for the erection of three-story brick building 75 feet wide. Work will begin about April 1.

Lawton, O. T.—Hospital.—Work will probably begin this spring on hospital to be erected by Drs. W. M. Turner, D. M. Myers and J. L. Lewis; three stories; brick or pressed stone; equipped with modern conveniences.

Little Rock, Ark.—School Building.—Chas. F. Thompson, Little Rock, Ark., has prepared plans for school building to be erected by the Sisters of Mercy on Pulaski Heights; four stories, 60x200 feet; ordinary construction; steam-heating plant; electric fixtures; passenger electric elevators.

Lookout (P. O. Hixson), Tenn.—Powder-house.—Aetna Powder Co. of Chicago, Ill., is negotiating for the purchase of about 15 acres of land near Lookout on which to erect powder magazine; building to have capacity of one car of dynamite and one car of black powder and be used as shipping station.

Louisville, Ky.—Store Buildings.—Udolpho Sneed is having plans prepared for 10-story brick store building.

Louisville, Ky.—Library.—Bids will be received for the Colored Branch Library until March 12 by Building Committee Louisville Free Public Library, 3-549 Fourth avenue; plans and specifications on file at office of McDonald & Dodd, architects, Equitable Building, and Building and Contractors' Exchange, Tyler Building; usual rights reserved.

Lynchburg, Va.—Store Building.—Jones & Adams have contract to erect store building for L. Lazarus after plans by E. G. Frye; four stories, 26x120 feet; red pressed brick with stone and terra-cotta trimmings; slow-burning construction; metal window frames in rear and windows of wireglass; electric elevator.

Lynchburg, Va.—Orphanage.—Edward G. Frye, Krise Building, is preparing plans for addition mentioned February 14 to be erected at Odd Fellows' Home near Lynchburg.

Mangum, O. T.—Hospital.—C. A. Stubbs, Lawton, O. T., has contract to erect pressed-brick hospital for Dr. J. L. Border, proprietor Border Hospital.

Martinsburg, W. Va.—Courthouse.—Berkeley county has plans under consideration for the improvement of courthouse at a cost of \$10,000. Address County Judge.

McAlester, I. T.—Fire Station and City Hall.—R. W. Harper has contract to erect fire station and city hall to be erected after plans by Smith & Parr; two stories, 50x100 feet; brick construction; gas fixtures; cost \$12,122.

Memphis, Tenn.—Apartment-house.—Estimates are being received on a \$75,000 annex to the Alcazar Apartment Co.'s building; building to be constructed of concrete to the first floor, the balance of red pressed brick with white brick facings and terra-cotta trimmings; interior equipped with electric and gas fixtures, two elevators, etc.

Memphis, Tenn.—Union Depot.—Reported that the Memphis Terminal Railroad Co. is completing arrangements for the construction of union depot and terminals at Memphis, referred to in this department in full October 25, 1906. The original plans call for a main station covering a space 200 feet square with a 50-foot platform all around; express-room 50x150 feet on the one side and baggage-room of about same size on other; space to be provided in yard for 438 coaches, together with coach and repair shops. About \$3,000,000 will be expended on passenger station and \$2,000,000 on terminals.

Memphis, Tenn.—Hospital.—College of Physicians and Surgeons and the Baptist Memorial Association are considering the erection of a \$150,000 hospital and will probably erect a four-story building.

Memphis, Tenn.—Apartment-houses.—Caruthers Court has been incorporated with \$66,000 capital stock by R. B. Snowden, Caruthers Ewing, S. R. Martin, Cleland K. Smith and E. C. Cochran to erect apartment-houses; stone, brick and terra-cotta construction; McKnight & Barker, contractors.

Midlothian, Texas.—School Building.—C. H. Page, Jr., Austin, Texas, has completed plans and will receive bids until March 11 for the erection of two-story school building, recently mentioned. Plans on file at architect's office, also at office of S. A. Below, Midlothian.

Millidgeville, Ga.—Dormitory.—Trustees of Georgia Normal and Industrial School have rejected all bids for the erection of dormitory, previously reported. The work will be done under the management of the local committee, composed of Prof. M. M. Parks, Hon. R. N. Lamar and Dr. E. A. Tigner.

Mobile, Ala.—Hotel.—Estimates are being received on the erection of a seventh story to the Hotel Cawthon, Charles B. Harvey, manager.

Monticello, Ark.—Courthouse.—Drew County Commissioners will consider plans for courthouse to be erected at a cost of between \$30,000 and \$40,000; James S. Denham, chairman.

Monticello, Fla.—Courthouse.—Jefferson County Commissioners are reported as considering plans for courthouse to cost from \$30,000 to \$40,000.

Morgan City, La.—Market Building.—C. L. Wise, Mayor, will receive bids until March 18 for repairing public market building, to include replacing of structural steel, corrugated-iron roofing, ventilators, painting of all steel work with mineral paint, according to plans and specifications on file with R. L. Gougenheim, Town Secretary. Usual rights reserved.

Mt. Savage, Md.—Roundhouse.—Cumberland & Pennsylvania Railroad Co. has awarded contract for rebuilding roundhouse reported recently as burned; total loss was \$10,000, not \$100,000, as at first reported. H. Rittenhouse, Cumberland, Md., is engineer maintenance of way.

New Orleans, La.—Freight Sheds.—Yazoo & Mississippi Valley Railroad is reported as completing arrangements for the erection of three double freight sheds, each occupying one square, divided in two parts with switch track for parking of cars in middle. T. E. Youngblood, Greenville, Miss., is supervisor of bridges and buildings.

New Orleans, La.—Apartment-house.—A. Aschaffenberg and associates will arrange for the erection of apartment-house.

New Orleans, La.—Apartment-house.—Jackson Investment Co., organized with \$50,000 capital stock, and Sam Stone, Jr., president; Frank M. Zigler, vice-president, and David H. Barnes, secretary-treasurer, will erect three-story brick apartment-house 60x100 feet.

New Orleans, La.—Hotel.—A. Monteleone, proprietor of the Commercial Hotel, is having plans prepared by Toledano & Wogan for new 500-room hotel; ten stories, 215x150 feet; fireproof steel construction.

Newport News, Va.—Hotel.—Co-operative Hotel Corporation has been chartered with Robert Kelsor, Charlottesville, Va., president; F. E. Harris, treasurer, and A. E. Gresham, secretary, both of Richmond, Va.; authorized capital stock \$50,000.

Newport News, Va.—Warehouse.—American Tobacco Co. (main office New York, N. Y.) is reported as arranging for the erection of sheet-iron warehouse.

Norfolk, Va.—Union Depot.—Norfolk & Western Railway, C. H. Churchill, Roanoke, Va., chief engineer; Tidewater Railway, H. Fernstrom, Norfolk, chief engineer, and other roads entering Norfolk are reported as arranging to erect union depot.

Oklahoma City, O. T.—Bank and Office Building.—Reported that Thomas Campbell has purchased site 25x140 feet and will erect a six-story bank and office building equipped with elevators and modern fire escapes. Starr & Chestney are the architects.

Oklahoma City, O. T.—Office Building.—Andrew Goodholm has purchased three-story building and will erect two additional stories and place a tile-floor basement beneath. About \$35,000 will be expended.

Oklahoma City, O. T.—Building.—Turbyfill & Mohr are preparing plans for two-story-and-basement frame residence, 54x32 feet, to be erected by C. H. Newell at a cost of \$10,000.

Oklahoma City, O. T.—Building.—Mathews & Bailey are preparing plans for residence to be erected by Richard Avey; frame; 40x60 feet; two stories and basement.

Oklahoma City, O. T.—Synagogue.—Reformed Jewish Congregation is reported to erect \$25,000 edifice. Address President of Congregation.

Oklahoma City, O. T.—Flat Building.—Hawk & Collington are preparing plans for flat building 45x90 feet for J. P. Allen; cost \$12,000.

Oklahoma City, O. T.—Building.—Geo. W. Flick is having plans prepared for three-story brick building 50x140 feet with concrete floor, costing \$26,000.

Oklahoma City, O. T.—Church.—Reformed Church of America will soon award contract for a one-story brick edifice, mission style, 80x50 feet, costing \$15,000.

Poplarville, Miss.—Power-house.—W. P. Craft, Ellisville, Miss., has contract to erect brick building with concrete floor for power-house to be used jointly by the water-works and electric-light plants.

Port Lavaca, Texas.—Clubhouse.—Directors of the National Game Preserve are arranging to erect a \$30,000 clubhouse at Alamo Beach. Address S. M. Scott.

Pulaski, Tenn.—Church.—W. B. Stillman has contract to erect edifice for the Methodist congregation; brick; cost \$5000.

Raleigh, N. C.—Apartment-house.—A. J. Jackson has contract to erect apartment-house for City Land Co.; ordinary construction; electric fixtures.

Raleigh, N. C.—Store and Office Building.—Jerome Rosenthal will erect a three-story fireproof building with stucco front after plans by H. P. S. Keller. A two-story structure will be erected in the rear.

Ridgedale (P. O. Chattanooga), Tenn.—School Building.—Hamilton County High School Board has adopted plans by Adams & Alsop for high-school building; three stories; brick with stone trimmings; gravel roof; steam heat; electric and gas fixtures; cost \$35,000. Main building will be 77 feet wide, with wing projecting from the east side 30 feet long.

Rome, Ga.—Barn and Stable.—F. L. Wood has contract to build barn and stable for C. C. Bass; reinforced-concrete construction; two stories; first seven feet to be six inches thick and the rest four inches.

San Antonio, Texas.—Clubhouse.—Elks' lodge has commissioned J. Flood Walker to prepare plans for \$30,000 building.

Seguin, Texas.—Residence.—John D. Goodrum has contract to erect \$8000 residence for Fritz Blumberg.

Sewells Point, Va.—Steel Pier.—Tidewater Railway Co. has awarded dredging and bulk-heading contracts for \$2,000,000 steel superstructure fendered pier previously reported to be erected at its terminals, dredging contract being awarded to P. Sanford Ross Company, Inc., Jersey City, N. J., and substructure to the McLean Contracting Co., 902 Maryland Trust Building, Baltimore, Md.; total amount of contracts \$500,000. The pier will be 1000 feet long, 60 feet wide and 65 feet high.

Sewells Point, Va.—Exposition Building.—John Colligan & Co., St. Louis, Mo., have contract to erect Georgia State building at the Jamestown Exposition in accordance with plans by P. Thornton Marye of Newport News, Va. W. N. Mitchell is president of the Georgia Commission.

Sewells Point, Va.—Exposition Building.—McLaughlin Bros. have contract to erect proposed building for the John Deere Plow Co., Moline, Ill., at the Jamestown Exposition; one story, 100 feet square; frame construction.

Shawnee, O. T.—Church.—Christian Congregation has had plans prepared by Peters & Nethercott for brick-and-stone edifice, consisting of auditorium with Sabbath-school annex; to cost \$20,000. Building will be 140x60 feet, with a seating capacity of about 1000.

Siloam Springs, Ark.—School Building.—School Board of Special School District has about completed arrangements for the erection of two-story pressed-brick building, for which \$25,000 is available.

Soddy, Tenn.—School Building.—Hamilton County High School Board has adopted plans by D. A. Reamer for high-school building.

South McAlester, I. T.—Opera-house.—Smith & Parr are preparing plans for opera-house, 80x150 feet, of classic design, to be erected by William Busby; cost \$80,000; building to be connected with the Busby Hotel by covered illuminated hall 20 feet wide.

Spartanburg, S. C.—Hospital.—Drs. H. R. Black, J. L. Jeffries and Geo. W. Heinitsch, owners of the Spartanburg Hospital, will erect 12-room addition to hospital.

St. Louis, Mo.—Clubhouse.—Theo. C. Link has prepared plans for \$60,000 building to be erected by the Wednesday Club; two stories, 90x132 feet; ordinary construction.

St. Louis, Mo.—Flat Building.—Dougherty & Bush Real Estate Co., 1013 Chestnut street, will erect flat building 26 feet 6 inches by 48 feet; ordinary construction; equipped with furnaces; cost \$30,000.

St. Louis, Mo.—Store and Flat Building.—Contract will be let March 6 for store and flat building to be erected by the Lindell Park Land & Manufacturing Co., after plans by E. Preisler; 67x50 feet; cost \$13,000.

St. Louis, Mo.—Residences.—A. A. Fischer Architectural & Building Co., 915 Chestnut street, will erect nine and ten-room residences on site recently purchased.

St. Louis, Mo.—Apartment-house.—Bids are being received on apartment-house to be erected by F. A. Banister after plans by Blair Ridington, 630 Chestnut street; three stories, 170x150 feet.

St. Louis, Mo.—Store and Apartment Building.—J. L. Weas, 10 Commercial Building, is preparing plans for store and apartment building to be erected by Mrs. Rosa Patrilli; two stories, 50x65 feet; ordinary construction; cost \$14,000.

St. Louis, Mo.—Building.—St. Louis Artists' Guild is having plans prepared by Louis C. Splering, Chemical Building, for two-story-and-basement building 34x82 feet; cost \$12,000; steam heat and electric fixtures included in equipment.

St. Louis, Mo.—Store and Office Building.—Monadnock Realty & Investment Co., Thos. J. McKittrick, president, is completing arrangements for erecting seventeen-story building; steel frame fireproof type, with smoke and fireproof fire escapes.

St. Louis, Mo.—Apartment-house.—Contract will be let at once for apartment-house to be erected by E. F. Hummert, Jr., after plans by Mariner & Le Beaume; cost \$40,000.

Teague, Texas.—Building.—Construction work has begun on building for the Teague Hotel & Improvement Co.; two stories, 35x140 feet; brick construction; electric fixtures; cost \$20,000. Charles Kaul, Mexia, Texas, is contractor.

Terrell, Texas.—College Building.—North Texas University will erect \$30,000 main building and two dormitories. Rev. J. J. Morgan is president.

Van Buren, Ark.—Warehouse.—Morgan-West Box Co. is arranging for the erection of an ironclad building 50x100 feet.

Waco, Texas.—School Buildings.—City will vote April 9 on the issuance of \$50,000 of bonds for additional school buildings. Address The Mayor.

Wake Forest, N. C.—Building.—Malone Oil Co. of Cleveland, Ohio, is reported as erecting building for distributing station.

Washington, D. C.—Dwelling.—Oscar G. Vogt, architect, Corcoran Building, 15th and F streets N. W., is preparing plans for one-story dwelling 40x50 feet to be erected at Petworth, D. C., for A. Mal; hot-water heating system will be installed.

Washington, D. C.—Dwelling.—Robert I. Carr, builder, 1320 G street N. E., will erect two-and-one-half-story brick dwelling at Petworth, D. C. Spelden & Spelden, architects, 705 G street N. W.

Washington, D. C.—Hotel.—O. G. Staples, proprietor Riggs House, 15th and G streets N. W., has commissioned Spelden & Spelden, architects, 705 G street N. W., to prepare plans and specifications for hotel building to be erected at southeast corner Pennsylvania avenue and 15th street N. W.; ten stories, 130x175 feet; brick with limestone trimmings; steel frame fireproof construction; electric wiring and fixtures; sanitary plumbing; steam-heating system; four passenger and one freight elevator; cost about \$1,000,000.

Washington, D. C.—Dwelling.—Dr. Wm. K. Butler, 1207 M street N. W., will erect two-and-one-half-story frame dwelling at Chevy Chase, Md.; electric wiring and fixtures; sanitary plumbing and steam-heating system will be installed. Spelden & Spelden, architects, 705 G street N. W.

Washington, D. C.—Dwelling.—Alonso O. Bliss, 35 B street N. W., will erect dwelling on 16th street near Scott Circle; three stories; brick with limestone trimmings; electric wiring and fixtures; sanitary plumbing; heating system. A. Goener, architect, Bliss Building, 35 B street N. W.

Washington, D. C.—Dwelling.—Mrs. Frank P. Mitchell, 1815 H street N. W., will erect dwelling on lot 62x100 feet recently purchased on Q street N. W.

Washington, D. C.—Dwelling.—George W. Vanderbilt, New York, is reported, has had plans prepared for the erection of dwelling at New Hampshire avenue, 17th and 8 streets N. W.

Washington, D. C.—Dwelling.—Mrs. Marshall Field, Chicago, Ill., has purchased lot at corner New Hampshire avenue and 17th street, and, it is reported, had plans prepared for large dwelling to be erected.

Washington, D. C.—Dwelling.—Mrs. Norman Williams, Chicago, Ill., has purchased lot on 16th street N. W., and, it is reported, will erect dwelling on the site, which is 35x100 feet.

Washington, D. C.—Dwelling.—Capt. Floyd Harris, U. S. A., retired, will erect large dwelling on Q street near New Hampshire avenue N. W.

Washington, D. C.—Dwelling.—Mrs. Platt Hunt, Chicago, Ill., has purchased site on

Sheridan Circle, and, it is reported, will erect large residence.

Washington, D. C.—Dwelling.—Morgan Royce, Colorado Building, 14th and G streets N. W., is having plans prepared for dwelling to be erected opposite Washington to cost about \$10,000.

Washington, D. C.—Dwelling.—H. A. Pressey, Colorado Building, 14th and G streets N. W., has commissioned Wood, Donn & Deming, architects, 808 17th street N. W., to prepare plans and specifications for the erection of large dwelling on Great Falls road, opposite Washington.

Washington, D. C.—Dwelling.—Harry Wardman, builder, 1333 G street N. W., will erect residence for himself at corner 14th street and Iowa avenue to cost about \$30,000; A. H. Beers, architect, 1333 G street N. W.

Washington, D. C.—Dwelling.—John R. McLean, 1500 I street N. W., has awarded contract to George A. Fuller Company, Munsey Building, 1331 Pennsylvania avenue N. W., for the reconstruction of dwelling at corner 15th and I streets N. W. and the erection of a large addition; cost of improvements about \$150,000; John Russell Pope, architect, 1133 Broadway, New York.

Washington, D. C.—Dwellings.—J. R. Halslip, builder, 1406 12th street N. E., will erect two two-story brick dwellings with hot-air heating systems at 833 and 835 5th street N. E. to cost \$7000; E. O. Volland, architect, 418 L street N. W.

Washington, D. C.—Dwellings.—Harry Wardman, builder, 1333 G street N. W., will erect six two-story brick dwellings with hot-air heating systems at 3023-3038 Dent street N. W. to cost \$9000; A. H. Beers, architect, 1333 G street N. W.

Washington, D. C.—Dwellings.—F. A. Blundon, builder, 1230 G street N. W., will erect six two-story brick dwellings with hot-water heating systems at 1201-1211 Howard street N. W. to cost \$30,000; A. M. Poynton, architect, 911 French street N. W.

Washington, D. C.—Dwellings.—Middaugh & Shannon, builders, Park road and Warder street N. W., will erect six dwellings at 3300-3310 Park place and five dwellings at 414-422 Luray place; two stories; brick with stone trimmings; hot-air heating systems; cost \$33,000; Joseph Bohn, Jr., architect, 215 D street N. W.

Washington, D. C.—Dwellings.—I. H. Bryant, 3525 11th street N. W., has awarded contract to George C. Hough, 619 14th street N. W., for the construction of four 2½-story dwellings at Petworth, D. C. Electric wiring and gas fixtures, sanitary plumbing and hot-water heating systems will be installed; cost about \$12,000; N. T. Haller Company, architect, Corcoran Building, 15th and F streets N. W.

Washington, D. C.—Dwellings.—George S. Cooper, architect, 1413 G street N. W., is preparing plans for the erection on Wyoming avenue between 18th and 19th streets of five large dwellings to cost \$75,000.

Washington, D. C.—Dwellings.—C. B. Kesterstein, architect, Colorado Building, 14th and G streets N. W., has awarded contract to John Houtz, 638 G street N. W., for the construction of four two-story brick dwellings at 768-776 Morton street, to cost \$8000, and four two-story brick dwellings at 729-747 Kenyon street, to cost \$8000.

Washington, D. C.—Dwellings.—Washington Building Co., Home Life Building, has awarded contract to Building and Supply Corporation, Home Life Building, 15th and G streets N. W., for the construction of 11 dwellings at 4120-4140 7th street N. W. and six dwellings at 4005-4015 9th street N. W.; two stories; brick, slate and slag roofs; electric wiring and fixtures; sanitary plumbing; hot-air heating systems; cost \$60,000; W. J. Palmer, architect, Warder Building, 523 9th street N. W.

Washington, D. C.—Dwellings.—Congressman Frank O. Lowden, Chicago, Ill., and Mrs. George M. Pullman, Chicago, Ill., have purchased lot 300x200 feet at corner of Massachusetts and California avenues and will erect two large dwellings on the site.

Washington, D. C.—Freight Shed.—The Philadelphia, Baltimore & Washington Railroad Co., 6th and B streets N. W., will erect freight shed at corner 4½ and E streets S. W.; one story, 35x511 feet; brick; corrugated iron sides; slate roof; electric lighting; cost \$45,000; Robert Farnham, Jr., assistant engineer, 820 C street S. W.

Waterloo, S. C.—Dwelling.—Carl Wharton is reported to erect \$5000 residence.

West Palm Beach, Fla.—Dwelling.—Reported that Richard Rushton of Philadelphia, Pa., has purchased site on which to erect residence.

RAILROAD CONSTRUCTION.

Railways.

Ada, I. T.—The Paula Valley Railroad Co., which was incorporated a few years ago to build from Ada via Paula Valley and Waurika, I. T., to Wichita Falls, Texas, 180 miles, has filed notice of change of name to the Seaboard Northern Railroad; capital \$5,000,000. The original incorporators are J. C. Amendt, Chicago; W. M. Freeman, Albert Rennie, J. B. Thompson, S. J. Garvin and J. C. Hybarger, Paula Valley; A. P. Williams, John Upshaw and J. P. Stovall, Wanette.

Baton Rouge, La.—C. G. Vaughn, chief engineer, is reported as saying that 15 miles have been graded on the 22-mile section of the Southern Pacific cut-off between Port Allen, opposite Baton Rouge, and the Atchafalaya river. West of the river to Lafayette, La., nearly all grading is done and the track laid. Delay has been experienced with erecting the bridge by reason of high water.

Bennettsville, S. C.—The Bennettsville & Cheraw Railroad has been purchased in the interest of the Scott Lumber Co. The new officers are: J. A. Heckart, president, Bennettsville, S. C.; H. A. Page, general manager; George Burchill of Sumter, S. C., secretary and treasurer. An extension of about 25 miles is to be built and the present road is to be repaired. Directors are W. A. Marr, Ashland, Pa.; F. P. Spies, Tamaqua, Pa.; H. S. Albright, Orwigsburg, Pa.; Alex. Scott, Frackville, Pa.; R. A. Wagner, Reading, Pa.; J. R. Page, Biscoe, N. C., and the officers. Mr. H. A. Page is president of the Aberdeen & Ashboro Railroad at Aberdeen, N. C.

Chattanooga, Tenn.—It is proposed to begin construction by April 1 on the interurban railway projected by S. W. Divine of Chattanooga from Chattanooga to Dalton, Ga., using for part of the way the Dalton & Alaculay Railroad roadbed.

Chattanooga, Tenn.—An officer of the Chattanooga Southern Railway informs the Manufacturers' Record that no decision has been made to build an extension northward from Chattanooga. This denies a recent press report.

Cheyenne, O. T.—The Oklahoma, Texas & Western Railway Co., which proposes to build from Clinton, O. T., to Canadian, Texas, 103 miles, will, it is reported, let sub-contracts in April. Donald Fitzgerald, 80 Wall street, New York, has the general contract for construction and equipment. H. D. Cox is president at Cheyenne, O. T.

Clay, W. Va.—An officer of the Buffalo Creek & Gauley Railway is reported as saying that J. V. Tulley of Sutton, W. Va., has been given the contract to build the proposed two-mile extension. William D. Janney is chief engineer at Clay and John Y. Boyd is president at Harrisburg, Pa.

Cleora, La.—The North Louisiana Railroad Co. of Cleora has been organized to build a line from Cleora to Lake Providence, La.; capital \$150,000. Among the principal stockholders are W. E. Farrell of Cleora, R. E. Farrell and Herman Kahn of Little Rock. The other directors are George W. Rogers and A. R. Bragg of Little Rock, Ark. Following are the officers: William E. Farrell, president; R. E. Farrell, vice-president; Herman Kahn, secretary and treasurer.

Colmesneil, Texas.—An officer of the Missouri, Kansas & Texas Railway informs the Manufacturers' Record that a preliminary survey has been made by someone from Washkom to Colmesneil via Newton, but that the company has made no survey between Trinity and Mineola, Texas.

Crowley, La.—Reported that the Kansas City Southern Railroad has secured control of the New Orleans, Crowley & Western Railroad and will use it in reaching New Orleans. A line will be built from Crowley to connect with the Kansas City Southern, and New Orleans, it is said, will be reached through connection with another line. A. F. Rust is chief engineer of the Kansas City Southern at Kansas City, Mo.

Cullman, Ala.—Reported that construction has begun on the first section of the Cullman Southwestern Railroad from Cullman to Bremen, 20 miles. The contract amounts to about \$600,000.

Dallas, Texas.—The American Engineering Co. of Indianapolis, C. N. Wilson, president, has, it is reported, begun survey for the Dallas Interurban Electric Railway, which is to run from Dallas to Greenville, Texas.

De Queen, Ark.—The De Queen & Eastern Railway is reported to have completed surveys for an extension from De Queen to Hot Springs, Ark., 125 miles. G. H. Cravens is chief engineer at De Queen, Ark.

Due West, S. C.—An officer of the Due West Railway Co. is quoted as saying that contract has been awarded to W. O. Willard of

Liberty, S. C., to grade the line from Due West to Donalds, S. C., four and one-half miles. T. C. Anderson of Greenwood, S. C., is chief engineer and R. S. Galloway is president at Due West.

Durham, N. C.—Ground has been broken at Raleigh, N. C., for the electric railway of the Durham Passenger Power Co., J. E. Bowling of Durham casting the first shovelful of dirt. Jones Fuller of Durham and others are interested.

Eddy, S. C.—The Eddy Lake & Northern Railway, under construction from Eddy Lake to Marion, S. C., has 12 miles finished from Eddy Lake to Hunting Swamp. Ernest Beatty is chief engineer at Conway, S. C. Norman James of Baltimore, Md., is president, and J. W. Little of Eddy Lake, S. C., is vice-president.

El Reno, O. T.—The Fort Smith & Western Railroad will, it is reported, build an extension from El Reno westward 100 miles to connect with the Kansas City, Mexico & Orient Railway. B. F. Beckman is engineer maintenance of way at Fort Smith, Ark.

Fayetteville, Ark.—Mr. J. W. Baxter writes the Manufacturers' Record that the proposed electric railway company is to connect the more important towns in Northwestern Arkansas and operate street railways in each. Rights of way and franchises are now being secured; company not yet incorporated. Its capital will be from \$150,000 to \$15,000,000 as demanded by the building of the road. J. T. Evans of Fayetteville and J. C. Bonnell of St. Louis will also be interested.

Florence, Ala.—O. G. Wales of Chicago, representing the Middle West Construction & Realty Co. of that city, is reported as saying that he proposes to build a railroad from Florence, Ala., via Waynesboro and Linden, Tenn., to Waverly, Tenn.

Florence, Ala.—According to a report from Lexington, Tenn., it is proposed to build a railroad from Florence, Ala., to Caruthersville, Mo. Mr. Dungan of Humboldt, Tenn., is said to be interested, and T. A. Lancaster, County Judge at Lexington, Tenn., may be able to give information about the plan. The route proposed is via Lexington and Sardinia, Tenn.; another route is via Wildersville and Decaturville.

Gainesville, Fla.—Reported that the Tampa & Jacksonville Railroad Co. has absorbed the Gainesville & Gulf Railway and that the extension southward to Tampa and eastward to Jacksonville will be made. S. F. Parrott is president, A. P. Stuckey first vice-president and C. N. Atkinson general manager. The other officers are B. W. Blount, second vice-president; F. M. Simonton, secretary; H. E. Taylor, treasurer.

Galveston, Texas.—An official of the Galveston, Houston & Henderson Railroad informs the Manufacturers' Record that the company contemplates an increase of three or four miles in its trackage on Galveston Island during the coming season, but it has not decided upon the plans in detail, and it will probably be two or three months before it will do so. F. A. Lister is acting manager, with office at Galveston, Texas.

Garvin, I. T.—The Choctaw Veneering Co. of Chicago has graded four miles of tramroad from Garvin toward the Red river and will shortly lay track.

Gulfport, Miss.—The incorporation of the Mississippi Southern Railroad Co. has been authorized by the Governor. This is the company recently reported as proposing to build a line about 225 miles long from Gulfport to West Point, Miss., via New Augusta, Laurel, Paulding, Hickory, Philadelphia and Louisville, Miss. It is proposed to begin construction immediately. The promoters are M. Muhle and T. H. Oden of Laurel, Miss.; A. H. Phiffer of Selma, Ala., and J. W. McBride of Louisville, Miss.

Haleyville, Ala.—W. J. Harahan, vice-president of the Illinois Central Railroad, is reported as saying that construction is progressing on the 80-mile extension between Haleyville and Corinth, Miss., and it will be ready for operating about July 1. He is further quoted as saying that while it is not definitely decided to build a new line with low grades between Birmingham and Jasper, Ala., it will probably be done sooner or later.

Hamlin, W. Va.—The Guyan, Big Ugly & Coal River Railway Co., it is reported, has been formed to build a railroad in Lincoln county from the mouth of Big Ugly creek to a point on Laurel Fork; capital \$100,000. The incorporators are J. W. Johnson, Mary A. Sims, H. T. Lovett, Paul W. Scott and Mary E. May.

Harrisonburg, La.—The Catahoula Central Railway Co. has authorized President Pindexter Dunn to have surveys made and to acquire rights of way and terminals, also to award contracts for construction and equip-

ment. The line is to run from Jenna via Manifest to Harrisonburg, about 25 miles.

Jackson, Miss.—The Pearl River Valley Railroad Co. is reported to be making final surveys from Jackson to Columbus, Miss., and most of the right of way from Jackson to Carthage, Miss., has been secured. Fred W. Herrick of Milwaukee, Wis., is president. He is also president of the Alabama & Tombigbee Railroad, which runs from Fulton, Ala., 10 miles to a point beyond Eustis, Ala.

Kansas City, Mo.—The Kansas City Terminal Co. and the city have reached an agreement concerning the proposed new passenger and freight terminals, which will cost \$50,000,000. John M. Egan is president of the company.

Laurel, Miss.—The Laurel & Waynesboro Railroad, chartered four years ago, will, it is reported, now be built, to connect Laurel, Waynesboro, Bladen Springs and Pascagoula. F. M. Shepard is president, and George Fagin and C. P. Weatherly at Waynesboro are interested.

Lawton, O. T.—J. T. Payne of Muskogee, I. T., is chief engineer of the Kansas City, Lawton & Pacific Railway Co., which proposes to build from Kansas City, Mo., to San Diego, Cal., 1600 miles; survey made from Kansas City to Ada, I. T., 290 miles, and survey under way from Ada to Lawton and the Red river, 190 miles. Construction is expected to begin about April 1. George M. Paschal of Lawton is president.

Lithonia, Ga.—The Atlanta, Stone Mountain & Lithonia Railroad Co. has been chartered to build a line from Decatur, Ga., to Stone Mountain, Lithonia, Ingleisle, Scottdale and Clarkston, 30 miles. The incorporators are A. O. Venable, A. B. Kellogg, R. M. Thompson, L. F. McClelland, J. S. McCurdy, D. Shepherd, G. R. Pace of DeKalb county, S. H. Venable, J. L. Patrick, T. C. Miller, J. N. Ellis, B. H. Hill and C. D. Hill of Atlanta. The road may also connect at Tucker with the Seaboard Air Line.

Martinsburg, W. Va.—Reported that the Pennsylvania Railroad, the Baltimore & Ohio Railroad and the Western Maryland Railroad contemplate building joint yards at Martinsburg. A. C. Shand is chief engineer of the Pennsylvania at Philadelphia, D. D. Carothers is chief engineer of the Baltimore & Ohio at Baltimore and John Q. Barlow is chief engineer of the Western Maryland, also at Baltimore.

Moccasin Gap, Va.—It is reported that survey is under way for a new railroad from Moccasin Gap to Dean Station, Tenn., paralleling the Southern Railway. The Seaboard Air Line is reported to be interested, but definite information is lacking.

Monterey, Va.—Reported that the Flint, Erving & Stoner Lumber Co. contemplates improving its railroad to make it a common carrier. The line begins at Dunlevie, on the Greenbrier branch of the Chesapeake & Ohio Railroad, and runs to Laurel Fork on the Staunton & Parkersburg turnpike.

Morganfield, Ky.—Reported that 23 miles of track are laid on the Morganfield & Atlanta Railroad and only seven miles remain to complete the line from Morganfield to connect with the Louisville & Nashville Railroad.

Nashville, Tenn.—Reported that construction will begin within a month on the electric railway from Nashville via Franklin and Columbia to Mount Pleasant, Tenn., projected by the Nashville & Columbia Interurban Railway. H. H. Mayberry at Franklin, Tenn., is president.

New Orleans, La.—The Yazoo & Mississippi Valley Railroad (Illinois Central system) is reported to have purchased about eight blocks of ground between Basin, Poydras, Claiborne and Lafayette streets to build new terminal yards for freight. A. S. Baldwin is chief engineer at Chicago.

New Orleans, La.—J. T. Harahan, president of the Illinois Central Railroad, is reported as saying that a second track will be built on the Yazoo & Mississippi Valley line from New Orleans to Baton Rouge, La., 90 miles. A. S. Baldwin is chief engineer at Chicago, Ill.

Oklahoma City, O. T.—An officer of the Santa Fe system informs the Manufacturers' Record that there is nothing in the press report that the company contemplated changing its line from Oklahoma City to Purcell, I. T. The matter has not even been considered.

Onedra, Tenn.—Charter has been applied for to build a railroad from Onedra to Elk Valley, on the Southern Railway. Bird M. Robinson, president of the Tennessee Railway, is said to be interested. W. O. Dyer is chief engineer of the latter road at Onedra, Tenn. Mr. Robinson's address is at the Hanover National Bank Building, New York city.

Onley, Va.—A meeting has been held at Onley to organize a company for building an electric railway to connect Onley, Onancock, Tasley, Accomac, Locustville and Wachapreague, Va. T. W. Taylor is chairman and Charles B. Waters secretary. Another meeting is to be held March 12.

Pensacola, Fla.—Reported that the promoters of the Pensacola, Alabama & Northwestern Railroad and the Pensacola & Northeastern Railroad have deposited \$15,000 with the Citizens' National Bank to guarantee construction within six months of 20 miles on each line. The first-named road is to run to Meridian, Miss., thence to Memphis, Tenn., and the latter to Andalusia, Ala. Local capital is interested.

Roanoke, Va.—C. S. Churchill, chief engineer of the Norfolk & Western Railway, is reported as saying that the company has new work under way as follows: Double track from Forest to Montvale, Va., 27 miles, with improved lines and grades; low-grade lines between Concord and Forest, 22 miles; double track from Davy to Jaeger, W. Va., seven miles. In addition to this the division yards at Roanoke, Va.; Bluefield and Williamson, W. Va., are being enlarged and will be completed by July 1. Besides this, other double-track work, as heretofore described, is under way at Welch, W. Va., one and a half miles; between Claren and Wilmore, W. Va., seven miles; west of Jaeger, W. Va., three miles, and west of Devon, W. Va., eight miles.

Rockland, Texas.—The Burrs Ferry, Brown-dell & Chester Railway has let a contract to W. E. Townsend to build six miles eastward from Aldridge.

Ruck, Texas.—The State Penitentiary Board has applied to the Legislature for authority to build six miles of extension of the State Railroad from Rusk to connect with the Texas & New Orleans Railroad near Gallatin, Texas. Benton McMillan is financial agent of the Penitentiary Board.

Stamford, Texas.—It is proposed to build a railroad from Stamford to the Spur Ranch in Kent and Dickens counties. S. M. Swenson & Co. of New York are interested in the plan, they having, it is reported, bought the ranch.

St. Louis, Mo.—The Hillsboro, Kimmswick & Northern Railway Co. has been granted six months' time to begin work on its proposed electric railway under \$5000 bond. The line will run from the St. Louis city limits to Kimmswick and Hillsboro, Mo.

Shawnee, O. T.—The Midland Valley Railroad, it is reported, will begin immediately construction of a new line from Jenks, I. T., to Kelfer and Shawnee, O. T. C. Kaighn is resident engineer at Muskogee, I. T.

Shreveport, La.—The Shreveport & Northeastern Railroad is reported to be pushing construction on its line from Shreveport via Minden and Homer, La., to Eldorado, Ark. The Northeastern Construction Co. of Homer and Shreveport has the latest contract, which covers 35 miles between Shreveport and Eldorado. Grading is done for 25 miles and five miles of track is laid.

Valdosta, Ga.—Surveys are reported complete for the Georgia & Florida Railway between Valdosta and Nashville, Ga., and the construction contract is to be let within two weeks. J. M. Turner is general manager at Augusta, Ga.

Wheeling, W. Va.—The Wheeling Terminal Railroad is reported to have purchased more property in the eastern part of Wheeling, and it is rumored that instead of additional yards the company proposes to build a new station for freight and passengers. A. L. Morgan is superintendent at Wheeling.

Wilburton, I. T.—The Missouri, Kansas & Texas Railway, it is reported, proposes to build an extension from Wilburton to Fort Smith, Ark., 70 miles. S. B. Fisher is chief engineer at St. Louis, Mo.

Street Railways.

Atlanta, Ga.—The Georgia Railway & Electric Co. has adopted plans to make extensive improvements, including the extension of lines on Capitol avenue, Luckie street and Stewart avenue; also for double-tracking several lines and the rebuilding of others with heavy rail. Thomas K. Glenn is vice-president and general manager.

Charlotte, N. C.—The Charlotte Consolidated Construction Co., operating the electric railway in Charlotte, proposes to build an extension of the Elizabeth line. E. D. Latta is president.

Huntsville, Ala.—The Huntsville Railway, Light & Power Co. contemplates building a loop and an extension.

Duncan, I. T.—W. S. Andrews and associates have, it is reported, been granted a franchise to build an electric railway in Duncan.

Jackson, Miss.—Gen. S. T. Carnes of Memphis is quoted as confirming the report that the Jackson Electric Light, Power & Street Railway Co. will build a line on North Jefferson street. An extension on Gallatin street and some double-tracking are also contemplated.

Jackson, Miss.—The Jackson Electric Street Railway, it is reported, will build another extension about a mile long.

Lexington, Ky.—The Lexington Railway Co. proposes to reconstruct its tracks in a substantial manner at a cost of about \$200,000.

Louisville, Ky.—The Louisville Traction Co. is reported to be considering plans for increasing its capital stock by \$3,000,000 for financing extensions and improvements. T. J. Minary is president.

Laurel, Miss.—It is rumored that a street railway will be built in Laurel. S. M. Jones of the Gulf States Investment Co., controlling the local electric plant, can probably give information.

Paris, Tenn.—The Legislative Council has granted a franchise to the Paris Electric Street Car Co. A line to Mayfield, Ky., and another extension to the Sulphur Well are contemplated. The officers are John C. Sweeney, president; John R. Rison, vice-president; Y. Q. Caldwell, secretary and treasurer. The directors are J. C. Sweeney, W. C. Johnson, O. C. Barton, J. R. Rison, F. M. Vancleve, W. W. Parabough and Y. Q. Caldwell.

Selma, Ala.—The Selma Street & Suburban Railway Co. proposes to build an extension. F. M. Abbott is president.

MACHINERY, PROPOSALS AND SUPPLIES WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Air Compressor.—D. L. McCaskey Machine Co., Springfield, Ohio, wants an air compressor, belt-driven, 10"x10"; second-hand in good condition.

Air Compressor.—Lidgerwood Manufacturing Co., Empire Building, Atlanta, Ga., wants second-hand air compressor to compress 600 to 1000 feet free air; cylinder 15 inches diameter, 30 or 35-inch stroke.

Amusement Devices.—John T. McKean, Cliffside, N. C., wants bowling alleys and similar amusement devices.

Automobile.—See "Traction Engine."

Belting.—A. D. McGirt, R. F. D. No. 2, Maxton, N. C., wants 70 feet 12-inch rubber belting, 70 feet 10-inch rubber belting and 100 feet 6-inch rubber belting.

Blower.—Charlotte Pipe & Foundry Co., Charlotte, N. C., wants one pressure blower, 18 to 25 tons capacity per hour.

Boiler.—High Point Hardwood Manufacturing Co., High Point, N. C., wants a new or second-hand 10 to 15-horse-power high-pressure boiler.

Boiler.—Abbeville Electric Light, Water & Power Co., C. A. Childs, manager, Abbeville, Ga., wants second-hand 80-horse-power boiler. (See "Engine and Boiler.")

Boats.—John T. McLean, Cliffside, N. C., wants rowboats and gasoline launches.

Boiler.—Smokeless Fuel Co., Huntington, Ark., wants one 75 to 100-horse-power boiler. (See "Engines and Boiler.")

Boiler.—J. C. Gore, care of Stewart House, Jacksonville, Fla., wants 45-horse-power horizontal boiler.

Boiler.—Continental Railway & Mill Equipment Co., 238 People's Building, Atlanta, Ga., wants second-hand 65-horse-power return-tubular boiler; Lagrange, Ga., delivery. (See "Engines and Boiler.")

Boilers.—See "Engines and Boilers."

Box Manufacturers.—Daniel McKie, Woodlawn, S. C., wants to correspond with box manufacturers prepared to purchase several hundred thousand feet of lumber suitable for boxmaking; prefers nearby plant.

Brick Machinery.—J. O. Houston, Queen City, Texas, wants machinery and equipment for a 20,000 or 25,000 brick plant.

Brick Machinery.—Louis Greig, St. Martinsville, La., wants brick machinery.

Brick Plant.—W. Lee Person, Rocky Mount, N. C., wants second-hand brick plant.

Broom Machinery.—W. A. Hall, Burkeville, Va., wants broom machinery.

Building Materials.—G. M. Jackson, Eagle Lake, Texas, wants metal ceiling and tile flooring.

Building Materials.—Sealed proposals will be received at the office of Building for National Museum, Library of Congress, Washington, D. C., until March 13 for furnishing Portland cement and sand for building; specifications, proposal blanks and other information furnished on application; Bernard R. Green, superintendent of construction.

Building Materials.—Rev. H. R. Osborne, pastor Simpson M. E. Church, Birmingham, Ala., wants prices on veneer stone.

Building Materials, etc.—Samuel C. Tatum Company, Cincinnati, Ohio, wants catalogues and information on building materials in connection with its plans for erecting four-story and basement 366-foot factory and 110x300-foot foundry, with power-house.

Causeway.—Clarendon County Commissioners, Manning, S. C., will open bids March 16 for completing causeway across north prong of Black river; not less than 20 feet at base, 16-foot surface and as high as portion of causeway now completed; usual rights reserved. R. E. McFaddin, Manning, S. C., is County Supervisor.

Cement.—Beaumont Construction Co., Beaumont, Texas, wants Portland cement for cement blocks and sidewalks.

Cement Machinery.—John G. Duncan Co., 308 West Jackson avenue, Knoxville, Tenn., wants machinery for making cement from cement rock.

Cement and Sand.—Office of Building for National Museum, Library of Congress, Washington, D. C. Separate sealed proposals for Portland cement and sand for this building will be received until 2 o'clock March 13 and then publicly opened. Specifications, proposal blanks and other information furnished on application; Bernard R. Green, superintendent of construction.

Concrete Machinery.—S. A. McCalskey, Vidalia, Ga., wants prices on machinery for making concrete blocks.

Crusher.—Sylecau Manufacturing Co., Rock Hill, S. C., wants a second-hand stone crusher.

Crushers.—Holston Water, Electric & Power Co., M. L. Fowler, president, Bristol, Va.-Tenn., wants rock crushers.

Electrical Equipment.—Holston Water, Electric & Power Co., M. L. Fowler, president, Bristol, Va.-Tenn., wants electric motors.

Electrical Equipment.—P. A. Rutledge, Opelousas, La., wants prices on electrical equipment.

Electrical Equipment.—Charlotte Pipe & Foundry Co., Charlotte, N. C., wants electric induction motors, 50 and 60 horse-power.

Engine.—J. C. Gore, care of Stewart House, Jacksonville, Fla., wants 35-horse-power engine.

Engine and Boiler.—Abbeville Electric Light, Water & Power Co., C. A. Childs, manager, Abbeville, Ga., wants 100 to 125 horse-power Harrisburg automatic engine and 80-horse-power boiler; both second-hand.

Engines and Boiler.—Continental Railway & Mill Equipment Co., 238 People's Building, Atlanta, Ga., wants for middle Alabama delivery 14x36 Corliss engine, 14x42 Corliss engines; for Lagrange delivery, 50-horse-power automatic or slide-valve engine and 60-horse-power return-tubular boiler; all second-hand.

Engines and Boiler.—Smokeless Fuel Co., Huntington, Ark., wants one small sinking engine, one 12x14 cylinder engine geared to four-foot drum about three and one-half to one foot, one 75 to 100-horse-power boiler.

Engines and Boilers.—Central Lumber Co., S. E. Moreton, secretary-treasurer, Brookhaven, Miss., wants engines and boilers.

Engines and Boilers.—P. A. Rutledge, Opelousas, La., wants prices on engines and boilers.

Excelsior Machinery.—William Caulk, Jr., Gumberry, N. C., wants excelsior machinery.

Excelsior Machinery.—J. F. Monk, Moultrie, Ga., wants excelsior machinery.

Foundry Equipment.—See "Wheelbarrow Machinery."

Feldspar Machinery.—See "Mining Machinery."

Foundry Equipment.—Samuel C. Tatum Company, Cincinnati, Ohio, wants catalogues and information on equipment used in manufacturing castings, copying presses, printers' machinery, hardware, blinders' machinery, etc.

Fuller's Earth.—J. F. Donahoe, Munsey Building, Washington, D. C., wants from 100,000 to 1,000,000 cubic yards genuine fuller's earth. State location, how far from railroad, name of road, county and State, and send sample to be analyzed.

Glass Manufacturers.—S. S. Connor, Box 176, Amite City, La., wants addresses of glass manufacturers.

Grates.—W. Lee Person, Rocky Mount, N. C., wants grates for burning brick with coal.

Grinding and Finishing Machinery.—Blacklock Foundry, South Pittsburg, Tenn., wants machinery for grinding and finishing Mrs. Potts irons.

Handle Machinery.—Gate City Handle Co., Melvin, Va., wants machinery for making small watchmakers' hammer handles.

Ice Machinery.—E. E. Reese, R. F. D. No. 3, Greer, S. C., wants machinery for ice plant.

Kilns.—H. Cardozo Sloan, Box 456, Jacksonville, Fla., wants two kilns for burning limestone; output 300 barrels in 24 hours.

Laundry Machinery.—E. E. Reese, R. F. D. No. 3, Greer, S. C., wants laundry machinery.

Levee Work.—J. T. McClellan, president Board of Commissioners, Fifth Louisiana Levee District, Tallulah, La., will receive bids until March 12 at office of Board of State Engineers, room 402 Cotton Exchange Building, New Orleans, La., for constructing L'Arant Levee; Tensas and Concordia Parishes, La., new levee, approximate contents 190,000 cubic yards; bond required, \$9500; deposit required, \$500; cash or certified check to amount of deposit required must accompany each bid; other information as to location, character of work and blank forms for proposals may be obtained at office of Board of State Engineers and at office of the Fifth Louisiana Levee District, Tallulah, La.; usual rights reserved. N. H. Lewis is secretary.

Machinery Dealers.—S. A. Blasingame, Clanton, Ala., wants to correspond with dealers in second-hand machinery.

Metal-frame Screens.—Huffman & Wagoner, 703 Candler Building, Atlanta, Ga., wants addresses of manufacturers of metal-frame screens.

Heating Plant Equipment.—Bids will be received until March 16 at the office of Superintendent U. S. Capitol Building and Grounds, Washington, D. C., for furnishing and delivering at site wrought-iron pipe, pipe bends, cast-iron fittings and gate valves for hot-water heating work, House of Representatives Office Building. Specifications can be had on application. Certified check or surety bond in the sum of 5 per cent. of amount of bid must accompany each proposal; usual rights reserved; Elliott Woods, Superintendent U. S. Capitol Building and Grounds.

Iron.—Elgin Pottery Co., Elgin, Texas, wants one car black iron, 24x28x101.

Iron-Bed Factory.—Wilmington Iron Works, 10 North 2d street, Wilmington, N. C., wants equipment for small iron-bed factory.

Iron Gates.—Columbus Showcase Co., Columbus, Ga., wants catalogues and prices on about one-half dozen folding iron gates.

Lighting Plant.—Natchez, Miss., will open bids May 1, 1907, for lighting the city for a period of 10 years from March 1, 1909. Specifications on file at office of George T. Elsiele, City Clerk, Natchez, Miss. For further particulars address City Clerk or A. C. Berdon, chairman light and water committee.

Logging Equipment.—Fort Smith Lumber Co., Adona, Ark., wants logging locomotives, logging cars, steel rails, steam loaders and complete logging outfit.

Machine Shops.—See "Novelty Works."

Machine Tools.—Meridian Light & Railway Co., A. B. Paterson, manager, Meridian, Miss., wants necessary lathes, etc., for complete repair shop for car bodies, trucks, motors, etc.

Machine Tools.—Woodridge Gln Co., T. J. Sheppard, president, New Birmingham, Texas, will probably purchase machine tools.

Mattress Machinery.—W. A. Hall, Burkeville, Va., wants mattress machinery.

Metal Workers.—G. W. Morgan, Salem, Va., wants addresses of manufacturers of metal key-check blanks.

Milling-plant Equipment.—A. D. McGirt, R. F. D. No. 2, Maxton, N. C., wants one one-inch Pemberton injector, one two-inch pop safety valve, one three-quarter-inch whistle and one one-and-one-quarter-inch check valve.

Mining.—Joseph L. Hunter, Augusta, Ga., wants full information regarding the mining and milling of feldspar, necessary machinery, etc.

Miscellaneous Supplies.—Bids will be received at office of D. W. Ross, general purchasing officer, Isthmian Canal Commission,

Washington, D. C., until March 18 for furnishing steam shovels, shaft pinions, racks and truck springs for steam shovels, radial drill, cold saws, saw grinders, pneumatic hoists, tool handles, shovels, lining and claw bars, rail tongs, track jacks, air gauges, steel rivets, wrought-iron pipe, valves, turnbuckles, draftsmen's supplies, cottonseed meal, etc. Blanks and general information relating to circular No. 354 may be obtained from the office of the general purchasing officer or the offices of the assistant purchasing agents, 24 State street, New York; Customhouse, New Orleans, La.; 1086 North Point street, San Francisco, Cal.; and 409 Chamber of Commerce Building, Tacoma, Wash.; also from Chief Quartermaster, Chicago, Ill.; Depot Quartermaster, St. Louis, Mo.; Depot Quartermaster, Jeffersonville, Ind.; and Chief Quartermaster, Atlanta, Ga.

Naval Supplies.—Proposals will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until March 19 to furnish at the navy-yards, Charleston, S. C., and Pensacola, Fla., and the naval station, New Orleans, La., as specified, a quantity of naval supplies as follows: Schedule 465—Terra-cotta sewer pipe and fittings, cast-iron pipe and specials, galvanized-iron pipe and fittings, hydrants, manhole covers, etc.; boilers, radiators, hardware and tools, melting furnace, etc.; pig-lead, galvanized sheet steel, steel shapes. Schedule 466—Brick, etc.; yellow pine, etc.; bronze powder. Schedule 467—Magnet wire, electrical supplies, fire-brick, sand, broken granite, Portland cement, hardware and tools, pig-iron, bar and sheet steel. Applications for proposals should designate the schedules desired by number. Blank proposals will be furnished on application to the Navy Pay Office, New Orleans, La., or to the Bureau. E. B. Rogers, paymaster general, U. S. N.

Naval Supplies.—Bids will be received at the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until March 19 for furnishing at the navy-yard, Washington, D. C., a quantity of naval supplies as follows: Schedule 473—Chart portfolios. Schedule 475—Feeder cable, switchboard, electrical supplies. Schedule 476—Bolts and nuts, cotters, set screws, electrical hoists, tools. Schedule 477—Machine, nickel, sheet and tool steel. Schedule 478—Fire felt, fuel oil. Schedule 479—Iron pipe and fittings, steam traps. Applications for proposals should designate the schedules desired by number. Blank proposals furnished on application to the bureau. E. B. Rogers, paymaster general, U. S. N.

Nickel-plating Plant.—Blacklock Foundry, South Pittsburg, Tenn., wants equipment for nickel-plating plant.

Novelty Works.—C. W. Gray, United States Cast Iron Pipe Co., 29 Chamberlain Building, Chattanooga, Tenn., wants to correspond with manufacturers of mechanical devices relative to making a stamping and sealing machine for envelopes.

Piping.—See "Heating-plant Equipment."

Planing Mill.—Central Lumber Co., S. E. Moreton, secretary-treasurer, Brookhaven, Miss., wants planing-mill machinery.

Power Plant.—Samuel C. Tatum Company, Cincinnati, Ohio, wants catalogues and information on equipment for power plant.

Pulverizing Machinery.—Joseph L. Hunter, Augusta, Ga., wants machinery for pulverizing feldspar. (See "Mining.")

Pump.—Leon Frankel, Madison, Ind., wants second-hand deep well pump, size 5"x24" or 6"x24", or about that size.

Railway Equipment.—P. A. Rutledge, Opelousas, La., wants prices on good second-hand locomotive and 35-pound relaying rails.

Railway Equipment.—Continental Railway & Mill Equipment Co., 238 People's Building, Atlanta, Ga., wants for Florida delivery one mile 12-pound rail and one second-hand Shay light locomotive.

Railway Equipment.—See "Logging Equipment."

Railway Equipment.—Fort Smith Lumber Co., Adona, Ark., wants logging locomotives.

Railway Rolling Stock.—Wanted.—Six 40-foot flat cars of about 40,000 capacity; second-hand standard gauge; cheap for cash; give full information and best cash prices. Address Georgia Machine & Equipment Co., Box 239, Atlanta, Ga.

Sawmill.—J. C. Gore, care of Stewart House, Jacksonville, Fla., wants sawmill to cut 10,000 feet per day, with all fittings, belting, etc., complete for actual service.

Sawmill.—J. Edward Stansbury, Jr., P. O. Box 51, West Point, Va., wants a second-hand portable sawmill cutting about 10,000 feet of lumber.

Sawmill.—Fort Smith Lumber Co., Adona, Ark., wants complete sawmill outfit.

Sewerage Construction.—The Baltimore

(Md.) Board of Awards, City Hall, will receive bids until April 10 for constructing the following sewerage work: Outfall sewer (11x12.3 feet concrete sewer), eight separate sections of 23,353 lineal feet; high-level interceptor (8.4 feet diameter concrete sewer), two sections, 5300 lineal feet; west low-level interceptor (concrete sewer), 350 feet 84-inch, 730 feet 80-inch, 645 feet 76-inch, 1940 feet 74-inch; cleaning and grading site of Back-river disposal plant, 120 acres of land to be cleared, 428,825 cubic yards of excavations, 331,150 cubic yards of rolled embankment and 3500 lineal feet vitrified underdrain. Plans and specifications may be obtained from the Sewerage Commission, Calvin W. Hendrick, chief engineer, 904 American Building.

Smelter and Roaster.—C. W. Maxon, Carlsbad, N. M., wants a lead smelter and roaster complete in every particular; capacity 40 to 100 tons in 24 hours.

Stave and Heading Machinery.—N. M. Pedigo, Kibler, Va., wants complete second-hand outfit for making slack barrel staves and headings.

Suspender Factory.—J. O. Reynolds, Hope Mills, N. C., wants catalogues and prices on equipment and materials used in manufacturing suspenders.

Telephone Supplies.—Amelia & Powhatan Telephone Co., Lodore, Va., wants telephone supplies.

Textile Machinery.—Wilmington Iron Works, 10 South 2d street, Wilmington, N. C., wants Crompton & Knowles 40-inch modern plain looms; second-hand preferred.

Tin Shingle Machinery.—W. S. Diver & Bro., Earle street, Anderson, S. C., wants machinery for manufacturing tin shingles.

Tin Specialty Manufacturers.—Coffeeville Bank, Coffeeville, Miss., wants to correspond with manufacturers of tin articles relative to making a tin tag with a lead seal in large quantities.

Traction Engine.—Owosso Manufacturing Co., L. Flickinger, secretary, Benton, Ark., wants road engine or equipment suitable for hauling lumber from mill to railroad, a distance of 10 or 12 miles; also lumber and log automobile.

Valves.—See "Milling-plant Equipment."

Water Heater.—Continental Railway & Mill Equipment Co., 238 People's Building, Atlanta, Ga., wants 150-horse-power feed-water heater, 200-horse-power feed-water heater; middle Alabama delivery; second-hand.

Water-wheels.—Holston Water, Electric & Power Co., M. L. Fowler, president, Bristol, Va.-Tenn., wants turbine wheels.

Wheelbarrow Machinery.—John C. Teague, English street, High Point, N. C., wants machinery for making iron wheelbarrows; also material for making the wheels.

Wheel Material.—See "Wheelbarrow Machinery."

Woodworking Machinery.—W. T. Letts Box & Cooperage Co., 5th and Jackson streets, St. Joseph, Mo., wants a chamfering and crozing machine.

Woodworking Machinery.—Leon Frankel, Madison, Ind., wants second-hand No. 1 saw table to carry 16-inch saw.

Woodworking Machinery.—See "Planing Mill."

Woodworking Machinery.—Woodridge Gin Co., T. J. Sheppard, president, New Birmingham, Texas, will probably purchase woodworking machinery.

MISCELLANEOUS WANTS NOT OTHERWISE CLASSIFIED.

Art Windows.—Rev. H. R. Osborne, pastor Simpson M. E. Church, Birmingham, Ala., wants prices on art windows, etc.

Office Furniture.—R. L. Wilson, Cordele, Ga., wants books, stationery, files, furniture, desks, etc.—equipment for real-estate, banking and private offices.

Seating.—J. F. Gallagher, Bessemer, Ala., wants to purchase about 2000 chairs.

Vehicles.—Alabama Polytechnic Institute, Auburn, Ala., will purchase a heavy wagon, truck or dray for handling heavy machinery; capable of hauling 10 to 12 tons, wheels furnished with wide tires, body to be very low and truck furnished with pole for hitching teams. Address A. St. C. Dunstan.

W. C. McNabb Company.

High-grade calendars and advertising specialties, printing, lithographing and engraving are the products of the W. C. McNabb Company of Birmingham, Ala. This company does not limit its activity to the Birmingham district, but is prepared to consider any and all classes of work from any part of the South, and orders received are given prompt and careful attention. There are McNabb branches at Atlanta, Ga.; Dallas, Texas, and Nashville, Tenn.

INDUSTRIAL NEWS OF INTEREST

Water and Light Bonds.

First mortgage 5 per cent. gold bonds to the extent of \$35,000 can be purchased. Address "Bonds," care of Manufacturers' Record.

Southwest Texas Lands.

Agricultural land, in any size tracts desired, is offered for sale in any county in Southwest Texas. Address O. D. H. Pfeuffer & Co., San Antonio, Texas.

Offers Maryland Farms.

Messrs. M. E. Haines & Son, 19 West Saratoga street, Baltimore, Md., offer for sale Maryland farms, suburban building sites, mineral and timber propositions.

Water and Electric-Light Plant for Sale.

A water and electric-light plant in a town of nearly 2000 inhabitants is offered for sale. Address A. B., care of Manufacturers' Record.

Metal Frame Fly Screen Agency Wanted.

An agency is wanted in Atlanta and Georgia for metal-frame fly screens. Address Huffman & Wagner, 703 Candler Building, Atlanta, Ga.

Machinery for Sale.

An opportunity is offered to purchase an Ingersoll air compressor, one No. 2 Gates crusher and one five-ton road roller. Address John C. Louis, 14 Builders' Exchange Building, Baltimore, Md.

Wants Southern Yarn Mill.

Parties desire to purchase or lease a 2000 to 5000-spindle mill equipped for manufacturing coarse yarns and located in Piedmont section of Georgia or Carolinas. Address No. 90, care of Manufacturers' Record.

Furniture Factory Purchasable.

A furniture factory in North Carolina making a cheap and medium grade of furniture, with established trade, can be purchased. Factory is located in growing town with good railroad facilities and abundant timber. Address "Furniture," care of Manufacturers' Record.

W. S. Barstow & Co.

Messrs. W. S. Barstow & Co. of New York and Portland, Ore., have issued an announcement of the opening of a Montreal office in the Bank of Ottawa Building, which will be in charge of Robert S. Stangland. This extension is necessitated through increase of business in Canada.

Would Invest in Southern Cotton Mill.

With several years' experience in the cotton-mill business and from \$25,000 to \$50,000 to invest in stock, a manager would take charge of modern Southern mill of not less than 5000 spindles. Address No. 88, care of Manufacturers' Record.

Wants General Manager for Furniture Factory.

Organizers of a furniture factory in Brevard, N. C., desire the services of a thoroughly-posted man as general manager who is willing to take at least one-tenth interest in the company. Address Brevard Board of Trade, Brevard, N. C.

Business Opportunities in Dallas, Texas.

The owner of unimproved block, 272x244 feet, located in heart of Dallas, Texas, and with main streets on four sides, will be leased in all or part for the erection of apartment-houses, warehouses, hotel, stores or auditorium. Address Henry D. Lindsley, Dallas, Texas.

Burt Ventilators in the South.

In a letter to the Manufacturers' Record the Burt Manufacturing Co., Akron, Ohio, large manufacturer of ventilators and oil filters, states that it is having a fine trade in the South among the textile mills, and among the recent orders closed in this class was one with the Summerville Cotton Mills, Summerville, Ga., for 16 30-inch ventilators.

Southern Underwear Mill on Market.

A fleece-lined underwear mill with capacity of 250 dozen in Columbus, Miss., will be offered for sale on March 20 to satisfy a trust deed. Building is three stories, 80x200 feet, and equipped with steam heat, electric lights and sprinkler system. The structure was built in 1905 and is equipped with modern machinery. Address Walter Weaver, Columbus, Miss.

A Texas Hardwood Plant Offered.

A hardwood mill, cutting 50,000 feet a day, together with 50,000,000 to 80,000,000 feet of hardwood, mostly oak, and 10,000,000 feet of pine, is offered for sale. The plant is fully equipped with modern machinery and is now in active operation. A logging road 10 miles in length, with full equipment, is also included. Address A. Dibreil, Flanagan, Texas.

Mining Properties Offered.

Lands containing high-grade brown iron-ore deposits, located on main line of railroad leading direct to Tennessee coal fields, are offered for sale. Owner will sell on easy payments, but prefers to sell one-half of his interest and put up half the working capital to develop the properties. Address W. M. Scott & Co., 210 Gould Building, Atlanta, Ga.

Maryland Manufacturing Site.

Any manufacturer employing 200 hands is offered for a nominal consideration a manufacturing site in a healthy district of Maryland within 30 miles of Baltimore. Property is located on the railroad and is improved with three water-powers of 100 horse-power each and suitable buildings for manufacturing purposes. Address Redmond C. Stewart, 207 North Calvert street, Baltimore, Md.

Death of Jos. B. Westbrook.

One of the leading Southern industrial enterprises lost its founder and president last month in the death of Jos. B. Westbrook of Danville, Va. Mr. Westbrook was for many years the active manager of the Westbrook Elevator Co., which he established, and his death is regretted not only by those who were associated with him in that enterprise, but also by many friends in both social and business life. The company will continue the manufacture of its elevators at Danville.

Mr. John Henry Parker.

It is of some interest to call attention to the facilities offered by John Henry Parker, who conducts offices at No. 7 Clay street, Baltimore, Md., as a general machine designer. He was formerly superintendent of the Snowden & Cowman Elevator Co., and for some years with the Crown Cork & Seal Co. as machine designer and mechanical expert. Inventors, manufacturers of machinery and others who may be desirous of having designs made for mechanical devices of any character are invited to confer with Mr. Parker.

Government Order for Vises.

The Pittsburg (Pa.) Automatic Vise & Tool Co., manufacturer of the well-known "Pittsburg" automatic vises, has the contract from the U. S. Government for vises to be shipped to Panama. This contract was secured in competition. Although this is the first introduction of the "Pittsburg" vise in Panama, it is but one of many orders filled by this company for Government deliveries. Because of the instantaneous removal of the body of the vise from its base, it is adapted for Panama use, as it permits the vises to be locked up at night without any of that trouble so common with other tools.

Blakeslee Company Is Busy.

The Blakeslee Manufacturing Co., 27 Du Quoin street, Du Quoin, Ill., is now in splendid manufacturing condition owing to the completion of its new foundry. E. T. Blakeslee, treasurer, said recently that although the company has been making the Blakeslee jet pump for 37 years, the demand of late has been almost more than it could meet. It almost seemed as if some people had only just awakened to the value of the little machine and were piling in their orders all at once. The company has been in business for 45 years, and is increasing its reputation for good pumps with each succeeding year.

"Savogran" for Cleaning Purposes.

To maintain proper sanitary conditions in the household, business and public buildings is the duty of everyone. To do this effectively it is necessary to often employ some compound that will cleanse thoroughly and permanently. For 32 years the India Alkali Works, 28-37 India wharf, Boston, Mass., has been manufacturing for this purpose a compound known as "Savogran." This compound is now being used in many departments of the U. S. Government, colleges, office buildings, mills, railroads, etc. In order to convince others of its meritorious quality the company will send a quantity on trial, which, if not satisfactory, may be returned.

Wheeler Underwriter Pump.

The C. H. Wheeler Manufacturing Co. has issued a circular on the C. H. Wheeler un-

derwriter fire pump, it describing in detail the difference between the "National Standard" and the "Trade Pump." The same circular describes the C. H. Wheeler auxiliary underwriter fire pump. This is practically a new pump designed by the company. It is approved by and built according to underwriter specifications, and recommended by them for the purpose of automatically keeping a pressure on the fire mains and at the same time provide a small supply of water until the large pump can be started. The Wheeler Company reports its pump department as being especially busy at the present time.

Investments in Arkansas.

The city of Little Rock and the State of Arkansas offer many opportunities for investment and industrial development. They have many natural advantages, and the advance of manufacturing, mining and general industrial development there are every day adding new opportunities for the investor or homeseeker to investigate. Agricultural enterprise is also active in the section referred to, and the erection of all kinds of buildings is taking the attention of building-owners, contractors and architects. Messrs. Adams, Boyle & Coates, 123 West Markham street, Little Rock, Ark., are making a specialty of Arkansas investments, and they invite inquiries from people who want to place capital to good advantage.

Southwestern Mercantile Agency.

Overdue accounts of business houses are not only a source of great annoyance, but oftentimes a loss of money as well, and many firms hesitate to push a customer to the last resort, as it may cause him to deal elsewhere. How much better it would be, then, to place such accounts in the hands of men who make this a specialty and are able to collect outstanding accounts diplomatically and without giving offense. The Southwestern Mercantile Agency, 404 Tulane Newcomb Building, New Orleans, La., undertakes collections of all kinds, adjustments and commercial reports throughout the United States and foreign countries, and gives its close attention to the successful culmination of all such business entrusted to it.

Samuel C. Tatum Company.

The Samuel C. Tatum Co., Cincinnati, Ohio, is contemplating the erection of a factory building 366 feet long, four stories and basement; also a foundry building 110x300 feet, with power plant, to properly care for large increase in trade. The Tatum specialties, besides iron castings for the trade, are copying presses, stationers' hardware, binders and printers' machinery and loose-leaf devices. Since its establishment in 1859 by the late Samuel C. Tatum, this enterprise has been at John and Water streets; but in the new location, Colerain and Monmouth avenues, the property being 266 feet front on Colerain avenue by about 500 feet deep, much needed room will be available. Catalogues and information on equipment bearing on this enlargement are wanted.

Mr. John F. Munn Now With Cyclone Drill Co.

The services of John F. Munn, formerly with the Davis-Calyx Drill Co. and the Cincinnati Core Drilling Co., have been secured by the Cyclone Drill Co., Orrville, Ohio, for its core-drill department. Mr. Munn has had a large experience with core drills in various parts of the country and is well posted on the geological formation throughout the mining districts, which enables him to give valuable advice as to the use of proper machinery and equipment. Among the recent orders received for this company's combined core and hollow-rod drilling outfits were those from William Gelder & Co., New York, for prospecting at Tonopah, Nev., and a duplicate outfit from O. W. Dunlap, Carlsbad, N. M., to develop a large mineral property.

Electrical Motor Drive for Printing Plants.

The installation of economical electrical motor-driven systems in printing plants by George F. Archer, consulting and constructing mechanical and electrical engineer, 39 Cortlandt street, New York, has met with much success, and one of the latest of these was for the plant of P. F. Haggerty, a well-known electrotypist of New York. This installation is complete in every detail and consists of 18 motors driving different machines, each machine being supplied with its own motor, thus eliminating entirely line shafting of any character and greatly improving the appearance of the shop. Mr. Archer makes a specialty of this class of work, and he will be pleased to hear from parties who are contemplating the installation of an individual motor-driven system.

Early Activity in Southern Brick Plants.

The spring season seems to be opening early if the experience of the Fernholtz Brick Machinery Co., St. Louis, Mo., is a criterion. Mr. W. L. Rodgers, the secretary of the company, said that already specimens of clay have reached him from some Southern cities for testing, whereas as a rule such samples usually come in a month later than this. The wonderful activity in all building lines in the South is largely responsible. The Fernholtz Company recently closed a contract with the San Juan (Mexico) Brick Co. for a four-mold brick press, which has just been shipped. This purchaser had a Fernholtz press originally, but sustained a loss by fire. On recommencing work it was determined to buy another press of the make which had stood by them for years and had given continuous satisfaction.

Mr. Mathew Cole of Newnan, Ga.

Among the Southern manufacturing enterprises which have become prominently connected with the great industrial advance which the South has made during recent years is the R. D. Cole Manufacturing Co. of Newnan, Ga. The reputation which this company has established for its products was largely the result of the active and personal interest of Matthew Cole, its vice-president, who for more than half a century was active in guiding the interests of the company. Mr. Cole died last month, and the company is calling attention to this bereavement in an appropriate card which is being sent to its friends. It is understood that this is the first death in the Cole family for nearly half a century, and the occurrence calls attention forcibly to the number of years the Cole enterprise has been conducted. Up to the present time three generations have been represented in its management—grandfather, father and son.

Automatic Refrigerating Co.'s Recent Orders.

The success of the refrigerating equipment and machinery as manufactured by the Automatic Refrigerating Co., Hartford, Conn., is indicated in the following orders recently received by the company: One-and-one-half ton refrigerating system in private residence of C. K. G. Billings, New York; five-ton drinking plant in the building of New York Edison Company, New York; one-and-one-half-ton refrigerating and ice-making plant at Vinton Colliery Co., Vintondale, Pa.; increase in plant formerly installed at St. Mary's College, North East, Pa.; four-ton refrigerating system in beefhouse of Wagner Bros., Baltimore, Md.; Hackett Bros., Watertown, Mass.; Hotel Lenox, Boston, Mass.; New Bedford (Mass.) public market; three-ton plant for T. D. Baker Company, Boston, Mass.; creamery plant for George E. Putnam & Sons, Lowell, Mass.; Brockton (Mass.) public market; beefhouse for Pierpont Bros. Company, Waterbury, Conn., and for the Connecticut Beef Co., Hartford, Conn.

New Company to Make Jacobson Vise

The Jacobson Machine Manufacturing Co. of Warren, Pa., has completed all arrangements with a new corporation organized in Rock Island, Ill., incorporated as the Rock Island Tool Co., providing for the complete transfer of the Jacobson Machine Manufacturing Co.'s vise business to the Rock Island concern. A good trade has been built up for these automatic vises, and inasmuch as the Jacobson Company is taxing its capacity with gas and gasoline-engine work, it was considered advisable to divide the business in this way. The Jacobson Company will retain a considerable interest in the new company, and as those engaged in the management of the new company are accustomed to manufacture of this kind, the Jacobson vise business will be well taken care of, and every indication points to the building up of a large and substantial business with the new company. The deal was negotiated through the management of the Jacobson Company, who were formerly Rock Island men. The new company expects to have the business under way by April 1.

Planning a Factory.

Messrs. Ballinger & Perrot, architects and engineers, Philadelphia, Pa., have completed plans and specifications and invited estimates, due March 7, for a new building to be erected for Boyertown Bural Casket Co. The building will be 79 feet 6 inches by 117 feet 6 inches, 10 stories and basement; mezzanine floor in first story; skeleton construction, using reinforced concrete for columns, floor and roof construction, with spandrel walls of brick; front in modern Renaissance style, first story being of granite, stories above of brick with terra-cotta trimmings; three brick enclosed stairways, two of which will be fire towers; one passenger and two

freight elevators; boiler plant in basement, with a four-foot-diameter steel stack in a brick shaft extending above roof; first floor for private and general offices, store, show-room and shipping department in rear; wagon area in rear in connection with shipping department will be extended to first row of interior columns, permitting wagons to be unloaded under cover; upper floors for storage and manufacturing.

TRADE LITERATURE.

Slatington-Bangor Calendar.

A calendar for 1907 in a large size and useful for hanging in factories, mills and other industrial plants is being distributed by the Slatington-Bangor Slate Syndicate, manufacturer, shipper and exporter of roofing slates, natural slate blackboards and roofers' supplies, Slatington, Pa.

The Patent Salesman.

Devoted to the announcement of good patents for sale in all lines of trade is the Patent Salesman, issued by Charles A. Scott, Mutual Life Building, Buffalo, N. Y. This publication presents offerings of patents which numerous inventors and proprietors wish to dispose of. Manufacturers seeking new products for which there will be found a market are advised to consult Mr. Scott's pamphlet. It may be added that Mr. Scott deals in patents of all kinds.

Yale & Towne Blocks.

With a full assortment of Yale & Towne triplex, duplex and differential blocks, the Carey Machinery & Supply Company, 119-121 East Lombard street, Baltimore, Md., is prepared to take orders for immediate delivery. Responsible companies who desire to investigate the merits of these blocks can obtain them on 30 days' trial before purchasing. Several interesting catalogues concerning these products have been issued, and any of them will be sent by addressing the Carey Company.

The Use of Time Checks in Factories.

Many ways have been devised to keep a strict and accurate account of the numerous employees in large industrial plants, and indicative of the use of time checks for this purpose has been the large increase in the sales of these checks by the American Supply Co., 24 Park place, New York. This company has been making checks for the past 30 years, and for the past 10 years it has noticed a constantly increasing use of them, and during the past two years the company has made more checks than in the preceding eight years.

Cementology for February.

The February issue of Cementology, which is published by the Whitehall Portland Cement Co., Land Title Building, Philadelphia, Pa., contains, among other interesting articles, an account of the Cement Users' convention in Chicago; "Comments on Advantages and Limitations of Reinforced Concrete," by Charles S. Hill; "The Making and Driving of Corrugated Concrete Piles," by Frank B. Gilbreth, and "Methods of Testing and Some Peculiarities of Cement," by W. A. Aiken. This cement magazine will be sent to those interested upon application.

Benjamin Products in Spanish Countries.

Owing to a constantly increasing exportation business of its electrical products to users in Spanish-speaking countries, the Benjamin Electric Manufacturing Co., Chicago, Ill., has found it necessary to issue a Spanish catalogue for the use of its patrons in those countries. This catalogue, which contains 64 pages, is devoted especially to the many varieties of electric-lighting fixtures and supplies which the company manufactures. These are illustrated and described and prices given. The necessity of issuing foreign catalogues is in itself a testimonial to the widespread use of Benjamin electrical products.

Concerning Metal Shingles.

A strong argument for the Cortright metal shingle is presented in an article entitled "The Completed Roof," presented in the February number of the Cortright Metal Shingle Advocate. Besides, the Advocate has other data and information tending to present to prospective and experienced architects and builders the advantages of metal shingles and kindred products for roofing purposes. The Cortright specialties are manufactured by the Cortright Metal Roofing Co. of Philadelphia and Chicago, which company is also issuing a book called "Rightly Roofed Buildings," and a copy of which every architect, roofer, builder, contractor and house owner should have for examination. Requests are invited.

The Tale of Two Jacks.

Jack Bright and Jack Dim are two gentlemen whose attributes are indicated in their names. The former is a prosperous chap, while the latter is always hard up. Their story is told interestingly in a neat leaflet which the Monarch Electric Manufacturing Co. of Warren, Ohio, has issued. The little publication explains why Mr. Bright was always so cheerful and Mr. Dim always in a bad humor, and their respective conditions of mind are connected with the use of the right kind of incandescent lamps for electric lighting. Mr. Bright was fortunate in using the Monarch lamp, and just why he obtained such satisfaction from them can be learned by perusing his story. Write the company mentioned for "The Tale of Two Jacks."

Some Fort Wayne Literature.

Among the most interesting trade literature that is issued from time to time, especially in the electrical industry, is that of the Fort Wayne Electric Works of Fort Wayne, Ind. This company is the manufacturer of the "Wood Systems," and its pamphlets and booklets are always complete in description and illustration, enabling readers to readily comprehend the characteristics of the different electrical appliances referred to. The Fort Wayne Company has issued recently an instruction book on the Fort Wayne series A. C. art systems and bulletins Nos. 1087, 1089 and 1090. These refer to the standard alternating-current switchboard panels for single-phase circuits, standard direct-current switchboard panels, and series A. C. arc-lighting systems.

For Cotton Oil Milling.

The treatment of the cottonseed, which for some time was considered a waste product, has become such an important adjunct to the cotton industry that any literature on the subject is naturally fraught with much interest. In preparing its new catalogue the Fooms Manufacturing Co., Springfield, Ohio, which manufactures machinery for this industry, has devoted much space to a discussion of the subject and to information that should be of much value to oil-mill men. The various machines are illustrated and described and statistics given showing how the installation of Fooms machinery will materially assist in the economical operation of a plant. The question of the loss in separation is considered at length with the view of showing how to reduce the loss to the minimum.

Inspection of Reinforced Concrete.

The duties of an inspector of reinforced concrete construction are such that he should follow closely every particle of the work, for upon him depends whether the structure is being constructed according to the plans and specifications, the reinforcement is being properly placed, and the concrete is proportioned, mixed and compacted in the proper manner. For the purpose of setting forth in detail the duties of an inspector on such work George P. Carver (lastly division engineer of the Florida East Coast Railway), Beverly, Mass., has compiled a booklet entitled "Instructions to Inspectors on Reinforced Concrete Construction." This volume contains all that an inspector should know in such work, and if carefully followed will bring successful results. It is published by the Payson Publishing Co., Bank Building, Beverly, Mass., and sells for 50 cents.

Fans, Blowers and Exhaustors.

Fans, blowers and exhaustors are described in a 96-page book recently published by the Green Fuel Economizer Co. of Matteawan, N. Y. Dimensions are given for 290 sizes and types of steel-plate fans for heating and ventilating, drying, mechanical draft, etc.; for 27 sizes and types of planing "mill exhaustors" for handling shavings, wool and other light materials, and also for a line of steam and hot-water heating coils. Typical installations, containing some of the largest fans ever built, are described in detail. In addition, there are over 20 pages of tables and data relating to air-moving engineering. The table of capacities, speeds and horse-powers for steel-plate fans has been recalculated throughout and several errors contained in the older table in general use have been corrected. This book will be sent gratis to engineers and others interested in the subject. It was mentioned in the Manufacturers' Record of March 7.

Green's Fans, Blowers, Exhaustors.

Fans, blowers and exhaustors for all purposes, including planing-mill exhaustors, are manufactured by the Green Fuel Economizer Co. of Matteawan, N. Y. This is known to many operators of industrial plants who have obtained full satisfaction from equipments installed by the company. Other manufacturers and managers of establish-

ments where such equipments are desirable are invited to examine the new Green catalogue for information on the subject. The catalogue mentioned is now being distributed. It gives descriptions and illustrations of the Green make of equipments, shows the types and sizes in stock, and tells of fans specially designed for various uses; also presents data as to certain improvements recently made in fan construction, together with engineering information and tables that are of value to the present or prospective user of exhaust installations. Write for catalogue No. 4.

The Peril of Fire.

Man could not exist without fire. By its agency we are protected in the winter, our food prepared, disease checked, life made pleasant. Yet mankind has a dread of fire and seeks to protect its buildings from the damage or destruction that the flames can accomplish. One of the various ways, one of the prime methods, of protecting buildings is on the roof. Roofing is given great attention by architects and builders so that the structures covered may have the greatest possible immunity from the possibility of conflagration. One thinks of these facts when glancing through the pages of the February number of *The Ridgepole*, which calls special attention this month to the peril of fire. The publication gives some data which people interested in buildings should consider. It tells especially about the Rex Flintkote roofing made by Messrs. J. A. & W. Bird & Co. of Boston, Mass. It shows how owners can protect their buildings from fire and from the weather and yet have that good appearance which is demanded.

Modern Cement-Making Machinery.

One of the most noted instances of industrial growth during recent years is seen in the manufacture of Portland cement. The United States used 42,000 barrels of this cement in 1880, and in 1905 the consumption was 35,000,000 barrels. This great increase was caused by the adoption of cement for all kinds of construction, and the manufacture of Portland cement has therefore become an important branch of industrial enterprise in this country. This fast-growing industry requires a vast amount of machinery, and in designing and manufacturing this class of equipment many prominent engineers have become engaged. These thoughts are prompted by the perusal of the forward in catalogue No. 7 of the Power & Mining Machinery Co. of Cudahy, Wis. The catalogue presents details of the company's cement-making machinery, a complete line of the latest improved equipment for the production of Portland cement by either wet or dry process. It gives important information regarding the growth of the cement industry, its present proportions and some hints as to the indications for the future. Inquiries for copies are invited.

Studebaker Vehicles.

The actual worth of a vehicle is not determined by its initial cost, but by the amount of service it renders. This terse and convincing statement is a byword of the Studebaker Bros. Manufacturing Co., South Bend, Ind., and the Studebaker vehicles, known the world over, are made with this idea constantly in view—to give the greatest amount of service possible. The February number of "The Studebaker," a little journal issued monthly in the interests and for the benefit of those who sell the Studebaker products, contains the usual amount of interesting reading matter, together with testimonials from those who have used these vehicles for a number of years. This number also contains a series of advertisements which the company has been running in the magazines for the past six months, and for attractive designs, convincing statements and general appearance they should in themselves prove very efficient silent salesmen. A continuation of the article on "The Watchdog of the Studebaker Reputation" says that one of the chief reasons for the wonderful growth of the Studebaker business has been the great care exercised in the purchase of material and conscientious workmanship.

Skylights—The Thos. W. Irwin Kind.

The skylighting of factory buildings, mills, warehouses, railway stations and other structures is an important part of their construction. Progressive architects, contractors and building owners are therefore always prepared to consider improved skylights offered by manufacturers, and they are invited to investigate the kind made by the Thos. W. Irwin Manufacturing Co. of Allegheny, Pa. This company has issued an excellent catalogue of its products, with plenty of illustrations to elucidate the text. It presents details of the materials, forms and sizes in which the Irwin skylights are made,

these having been perfected through an experience of many years. The Irwin system of skylight construction has the advantages of simplicity in design and manufacture, lightness, strength and durability in the materials, and entire satisfaction in the results obtained. The Irwin is made entirely of metal, all parts being formed of one piece, with joints well riveted and soldered, making a thoroughly permanent and fireproof article. The Irwin plant also produces such kindred articles as ventilators, gutters, conductors, ridge roll, cornice, blast pipe, metal window frames and sash, etc. Send for catalogue, now ready for distribution.

Farquhar Machinery for 1907.

In compiling its catalogue for 1907, the fifty-first year of its existence, the A. B. Farquhar Company, Ltd., York, Pa., has endeavored to include such information as it believes will be of the greatest benefit to the intending purchaser. This will enable him to determine just what is best for his requirements. The company states that the past year has been one of unusual activity and its factory was taxed to its utmost capacity to supply the demand for Farquhar machinery. These conditions, however, were met by increasing the output of engines, boilers, sawmills and threshers to such an extent that the plant can safely take care of all orders that may be received during the present year. The Farquhar traction engine has been added to the company's line this year and is illustrated and described in the catalogue, which also contains illustrations and brief descriptions of the company's engines, boilers, sawmill and threshing machinery. The A. B. Farquhar Company issues another catalogue covering its grain drills and other implements. A pamphlet containing specifications and a telegraph code of the company's products has also been issued, and this will be found of much service to intending purchasers in facilitating and simplifying the ordering of machinery desired.

Jeffrey Coal-Handling Machinery.

Economical power production is the ultimate goal of every user of power, and progressive manufacturers are continually on the alert to improve their plants by the installation of auxiliary mechanical contrivances that will not only reduce the cost of power, but also give greater efficiency to the plant. There is no doubt that one of the most labor-saving and efficient devices perfected in this respect is automatic machinery for handling coal and ashes. So high has this machinery been carried in perfection and practical usage that no modern power plant is built or thought of today except in connection with the use of such machinery. Machinery of this character and in all of its branches is manufactured and installed by the Jeffrey Manufacturing Co., Columbus, Ohio, and it has issued two bulletins which will be found of much interest to power managers generally. Bulletin "C" is devoted exclusively to coal and ashes-handling machinery, and illustrations are given of many well-known industrial companies throughout the country which are now using the Jeffrey equipment. Bulletin "B" covers the grab-bucket system of handling coal and ashes, and the efficiency of these systems can be readily seen in the photographs of a number of installations. The Jeffrey Company will furnish full estimates, plans and general data to those contemplating the installation of machinery of this character.

Crucibles—Their Care and Use.

The above heading is the title of a most comprehensive book on the subject of graphite crucibles, which are also known as plumbago or black-lead crucibles. This book should be in the hands of everyone interested in the melting of the various metals. Its author is John A. Walker, vice-president, treasurer and general manager of the Joseph Dixon Crucible Co., Jersey City, N. J. Mr. Walker has been connected with the Joseph Dixon Crucible Co. for 40 years, and for 39 has been an officer and director of the company and its general manager. He is therefore thoroughly fitted by his long years of experience in crucible making to be an authority on the subject. The purpose of the book is to instruct users of crucibles as to their proper use and the dangers of abuse of crucibles. It tells what graphite is, and why crucibles are made of it; why crucibles must be made of flake graphite; why some crucibles are dark and others light, and the importance of that fact; that most crucibles are perfect when they reach the user, and that much of the trouble that comes is due to the fault of the user; gives rules for annealing crucibles, and tells why all of them should be carefully followed; why crucibles should be bought in quantities; the use of tongs for handling crucibles and their misuse by careless melters; of the proper shape of tongs and how they should be handled,

and how the metal should be placed in the crucibles, and how the crucibles should be placed in the fire. The book fully describes the various fuels used in melting metals and their effect on the crucibles. It speaks of the importance of perfect combustion and carries much allied information, giving the proportions of metal in commonly-used alloys. It tells the freezing, fusing and boiling points of various substances. It gives the specific gravity of various metals and other commodities. It gives the comparative value of fuels and much other information of value in the foundry. The double-page center of the book presents a most vivid and realistic foundry scene. The illustrations are the highest specimens of photographic art, and the book in its entirety is a credit to its well-known author and to the printers, the Bartlett-Orr Press.

For Concrete Users.

The use of cement concrete in many forms of construction for which heretofore other materials have been used has created a demand for concise and reliable information in regard to the use of this material. With the idea of supplying this want Homer A. Reid, Assoc. M. Am. Soc. C. E., assistant engineer Bureau of Buildings, New York city, has compiled a volume on the subject entitled "Concrete and Reinforced Concrete Construction." In the preparation of his work the author has made it, as far as possible within reasonable limits, a complete treatise on the properties and uses of concrete and reinforced concrete as applied to construction, and a logical development of the subject has been followed. In handling his subject the author has endeavored to make it not only a reference book for engineers, architects and contractors, but also to make it sufficiently simple and comprehensive alike to the engineering student and the general reader. This, it is believed, has been successfully accomplished, and anyone interested in concrete, whether a technical man or a layman, will find here an opportunity to become well posted on this popular form of modern construction.

The first two chapters are devoted to the history, classification and manufacture of cement, its properties and methods of testing. To some this may appear superfluous, but on the general broad principle that no one can know too much concerning the work he is doing or about to undertake, it is an essential feature, and one that cannot fail to impress its importance upon the reader and render the abuse of cement less likely to occur.

In discussing the sand and stone in concrete, commonly termed the aggregate, he says that it is necessary that this aggregate should be selected with great care, for no matter how much or how good the cement, if the aggregate is weak or of inferior materials the concrete will be of poor quality. The different mixtures of the aggregate ingredients are explained and the effects of the sizes, quality and impurities discussed. The proper proportioning of concrete, which depends largely upon the nature of the work in hand, is then taken up. In any case, however, it is impressively brought out that to obtain a well-balanced and compact mixture care must be exercised in choosing and assembling the ingredients that will produce this result. Numerous proportions are explained and a series of standard tables are given that should prove themselves of valuable assistance. Then follows the next important step of mixing the ingredients, and the author emphasizes the importance of doing this properly and gives the following points that should always be insisted upon: 1. Exact measurement of materials; 2. thorough mixing until the color and consistency of the mass are uniform throughout; 3. that the correct amount of water is used; 4. that proper care is taken in dumping the concrete in place. Concrete mixing machines of each of the various types in most frequent use are described and illustrated. The placing of

concrete, another equally important step to insure good results, is then taken up and fully explained, together with the various tools used in this work, and the various methods of depositing concrete under water are discussed.

In covering the cost of concrete the author did not attempt to give extended data on this, but rather to analyze the factors entering into the cost, so that an estimator may form a correct cost estimate from known conditions.

Special precautions are necessary to secure a good finish to exposed surfaces of concrete work, and these are set forth at length and tables given for obtaining various colors for imitating the different natural stones.

The discussion of the general physical properties of concrete includes the effect of freezing; securing impermeable concrete; the various methods of waterproofing and their cost; the effect of sea water and oil on concrete; the preservation of metal in concrete; adhesion between concrete and steel; the shrinking and expansion when setting; fire-resisting qualities; strength tests and the effect of flue gases and moisture on concrete.

The strength of concrete varies greatly, this being due to a number of causes, the most important of which the author considers the following: 1. The quality and amount of cement used; 2. the kind, size and strength of the aggregate; 3. the thoroughness with which the ingredients are balanced; 4. the method of mixing and the thoroughness with which it is done; 5. its age. The various elements effecting the general elastic properties of concrete are described and results of numerous tests are quoted.

Reinforcing metal is next taken up and the principles and disposition of the reinforcement are discussed, together with the methods devised to secure mechanical bond and the various styles of reinforcement used for slabs, beams, columns, wall arches and pipes, all of which are fully illustrated. The general phenomena of flexure and the theory of beams and columns are covered at length and working formulas given, together with results of the latest available tests. A description then follows of the bearing power of soils for construction work and the various methods of foundation construction, including concrete piling, are explained according to different existing conditions.

Under the head of general concrete construction of buildings the author illustrates and describes the principles of all of the various systems which have been put into practical usage. This is followed by a discussion of the application of concrete for the construction of dams, sewers, conduits, tanks, reservoirs, stand-pipes, water towers, chimneys, tunnels, subway construction, railroad ties, fence-posts, piers and wharves. Several chapters are devoted to bridge construction, including forms and arch bridge centers, bridge floors, piers and abutments. The concluding chapter covers concrete blocks, which have obtained such a wide usage in all parts of the country, and the various types used and their application to building construction are illustrated and briefly described.

There seems to be no portion of concrete or reinforced concrete that has not been touched upon, and the thoroughness and carefulness with which the author has handled his subject should make it a valuable assistant to engineers, architects, contractors and those interested in concrete generally.

The volume, which contains 874 pages, is bound in cloth and printed on good glazed paper. It is published by the Myron C. Clark Publishing Co., 13-21 Park Row, New York, and sells for \$5.

THE PENNSYLVANIA RAILROAD COMPANY

General Office, Broad Street Station.

PHILADELPHIA, 1st March, 1907.

The Board of Directors submit herewith to the Stockholders of the Pennsylvania Railroad Company a synopsis of their Annual Report for the year 1906:

The gross earnings of all lines directly operated were.....	\$148,229,882 44
Operating expenses.....	101,806,644 25
Net earnings from operation.....	\$46,423,238 19
Deduct rentals paid roads operated on basis of net earnings.....	7,900,899 20
Net operating earnings of the Pennsylvania Railroad Co.....	\$39,133,338 99
To which add:	
Interest from investments.....	\$12,087,293 27
Rental of equipment and other items.....	896,968 92
	12,784,262 19
Gross income.....	\$51,917,601 18
Deduct:	
Fixed rentals of leased roads.....	\$4,140,592 35
Interest on bonded debt.....	7,387,652 11
Interest on mortgages and ground rents, interest on car trusts, taxes, etc.....	4,715,065 92
	16,243,300 38
Net income.....	\$35,674,300 80
From this amount the following deductions have been made:	
Payments account Sinking and Trust Funds and principal of Car Trusts.....	\$4,608,165 51
Extraordinary expenditures.....	8,701,474 54
	13,309,640 05
Dividends aggregating 6½ per cent.....	\$22,369,659 75
	19,869,660 75
Amount transferred to Extraordinary Expenditure Fund.....	\$2,500,000 00
	2,500,000 00
Amount to credit of Profit and Loss December 31, 1906.....	\$24,725,484 36
Profit from sales of stocks and settlement of sundry accounts, etc.....	\$15,300,848 66
Deduct amount applied toward construction of New York tunnel line.....	\$13,000,000 00
Deduct amount transferred to Extraordinary Expenditure Fund.....	2,200,848 66
	\$15,300,848 66
Amount to credit of Profit and Loss December 31, 1906.....	24,725,484 36

GENERAL BALANCE SHEET (CONDENSED), DECEMBER 31, 1906.

Assets.	Liabilities.
Cost of road, equipment and real estate.....	Capital stock.....
Securities owned.....	Funded debt (including mortgages and ground rents).....
Leasehold interest in Harrisburg, Portsmouth, Mt. Joy & Lancaster Railroad.....	Guaranteed stock and bonds of the Harrisburg, Portsmouth, Mt. Joy & Lancaster R. R. Co.....
Accounts receivable:	Securities received with the lease of the U. N. J. R. R. & C. Co.....
Sale Norfolk & Western and Chesapeake & Ohio stocks.....	Car Trust principal and taxes charged out and awaiting settlement.....
Securities received with the lease of the U. N. J. R. R. & C. Co.....	Pennsylvania Company Deposit Account.....
Loans for construction and real estate purposes to various controlled companies.....	Extraordinary Expenditure Fund.....
New York Tunnel Extension.....	Current Liabilities:
Current Assets:	Payrolls, vouchers and net traffic balances.....
Due from controlled companies for advances for construction and other purposes.....	Due controlled companies other than traffic balances.....
Due from agents.....	Due Saving, Relief and Insurance Funds, etc.....
Bills receivable and miscellaneous assets.....	Interest accrued, matured and uncollected, and dividends uncollected.....
Materials.....	Miscellaneous liabilities.....
Cash.....	
Sinking Funds, Trust Fund and Insurance Fund.....	Sinking Funds and Trust Fund.....
	Profit and Loss.....
Total.....	Total.....

FUNDED DEBT.

The amount of funded debt, including mortgages, real estate and ground rents, December 31, 1906, was \$191,561,270.82, being a decrease of \$391,176.67.

SECURITIES OF OTHER CORPORATIONS.

The entire cost of the securities of other corporations held by your Company December 31, 1906, was \$194,709,719.01, and the direct revenue received therefrom during the year was \$11,741,184.33, being 6.03 per cent. upon the cost thereof.

It will be noted that there has been a large decrease in your holdings of the securities of other corporations. This is due to the fact that as the object sought through their purchase, viz., the promotion of a more conservative policy in the management of some of the large railways reaching the seaboard, and the doing away with unjust discriminations between shippers had been largely accomplished, and through the passage of recent amendments to the Interstate Commerce law and the enforcement of its provisions, the maintenance of tariff rates had been practically secured, it was deemed advisable to sell a portion of the securities heretofore acquired.

This sale covered all of your Chesapeake & Ohio Railway Stock and a majority of your holdings in the Baltimore & Ohio and Norfolk & Western Railways, and as a result thereof a large profit has accrued to your Company which, as before noted, has been credited to your Profit and Loss Account.

CAR TRUSTS.

In order to supply the equipment needed for your traffic, a large additional issue of car trust securities was made during the year. This issue embraced the remaining certificates of the Pennsylvania Steel Rolling Stock Trust, \$2,700,000; all the series of the Pennsylvania Steel Freight Car Trust, less the amount matured, \$9,300,000; all the series of the Pennsylvania Steel Equipment Improvement Trust, \$10,000,000, and twenty-two series of \$1,000,000

each, and \$218,000 of the twenty-third series of the issue of 1906 of the Pennsylvania General Freight Equipment Trust Association.

This latter Association has been created for the purpose of supplying through one instrumentality the equipment for the lines in the Pennsylvania Railroad system, and hereafter its certificates will be issued in series which will be designated not only by the letters of the alphabet, but by the year of issue.

The total number of Car Trust cars now in service is 94,873, and the Car Trust certificates outstanding December 31, 1906, aggregates \$71,018,000.

TRAFFIC.

The number of tons of freight moved on the four grand divisions east of Pittsburg and Erie in 1906 was 172,371,063, an increase of 15,367,296, or 9.79 per cent.; the number of passengers was 62,108,708, an increase of 6,326,899, or 11.34 per cent.

The other Railroad Companies east of Pittsburg and Erie in which your Company is interested show satisfactory results. Detailed statements of their operations will be found in their respective annual reports, as well as in the full report of your Company.

CAPITAL STOCK AND FUNDED DEBT—LINES WEST OF PITTSBURG.

The prosperous condition of the manufacturing interests of the country, and the great increase in the consumption of ore, coke, coal and other materials, as well as in the output of the finished product, has forced upon the lines on which the large iron and steel industries are located an exceptional expenditure for tracks, equipment, yards and other terminal facilities. This is especially the case upon the roads embraced in your Northwestern system; and in order to meet these demands and supply the Pennsylvania Company with the working capital needed for its general corporate purposes for several years, an issue was made April 2, 1906, of \$30,000,000 of 4 per cent. Collateral Trust Certificates, running for 25 years, with the right of redemption by the Company at any time after 15 years. These certificates are guaranteed, principal and interest, by your Company.

It will be noted that after paying a dividend of 6 per cent. for the past year, making large contributions to its various Sinking Funds and transferring \$2,500,000 to an Extraordinary Expenditure Fund, the Pennsylvania Company carried a substantial balance to the credit of its Profit and Loss Account. The Pittsburg, Cincinnati, Chicago & St. Louis Railway Co. was also able, after making the payments required by its Sinking Funds and applying a substantial sum toward the principal of Car Trusts and to Extraordinary Expenditures, to increase its dividends to 5 per cent. on its preferred and 3½ per cent. per annum on its common stock and further add to its Profit and Loss Account.

The Vandalia Railroad Co. also increased its dividend to 4½ per cent. and appropriated out of its surplus income \$400,000 to an Extraordinary Expenditure Fund. This Company sold an additional \$3,000,000 of its Consolidated Mortgage 4 per cent. Bonds, due 1905, in order to provide the necessary funds for its capital expenditures and recoup its treasury for the amount expended in the redemption of \$600,000 Terre Haute & Indianapolis Second Mortgage 5 per cent. Bonds.

CAPITAL EXPENDITURES.

The amount of Capital Expenditures during the year on the Lines west of Pittsburg for construction, equipment and real estate was \$9,781,235.44.

In these expenditures were included large outlays upon track elevation in Chicago and Allegheny, upon the revision of line and extension of the double-track system on the Pittsburg, Cincinnati, Chicago & St. Louis Railway, the improvement of yards, docks and other terminal facilities, the increase of sidings, and especially upon additional motive power and equipment for both your Northwestern and Southwestern systems.

TRAFFIC.

The number of tons of freight moved on the lines west of Pittsburg was 142,370,099, an increase of 17,184,429. The number of passengers carried was 30,413,560, an increase of 2,153,125.

The gross earnings of all lines east and west of Pittsburg for the year 1906 were \$235,398,165.24, operating expenses \$211,543,766.03 and net earnings \$24,354,399.21, an increase in gross earnings, compared with 1905, of \$29,828,567.48, and an increase in net earnings of \$10,385,149.87. There were 363,956,827 tons of freight moved on the entire system, being an increase of 37,978,938 tons, and 140,513,364 passengers carried, an increase of 14,509,825.

GENERAL REMARKS.

The Employees' Voluntary Relief Department, the Employees' Saving Fund and the Pension Department show excellent results, and are fully meeting the purposes of their organization. It has been found to the advantage of the Company, in the operation of the Pension Fund, to retire a more liberal percentage of the employees who have, after 30 years' service, reached an age between 65 and 69 years, and the demands thus made upon the Fund will necessitate a larger appropriation. Your authority will therefore be asked to increase the annual sum set apart for that purpose from \$300,000 to \$500,000. It having also been determined that it is to your interest that the limitation on admission to the service shall be fixed at 45 instead of 35 years, your approval of that change will be requested.

It will be recalled that at the meeting of the Shareholders in 1903, the necessary authority was given for an increase of the capital stock to \$400,000,000. After setting aside the amount required for the conversion of the 3½ per cent. Convertible Bonds of 1902 and 1905, there is, as appears from the following statement, but a small residue available for your corporate purposes.

Total authorized issue.....	\$400,000,000
Outstanding December 31, 1906.....	\$306,961,350
Amount required for the conversion of the 3½ per cent. Convertible Bonds of 1902 and 1905.....	80,702,350
Amount required for the acquisition of the Stock of the Cumberland Valley Railroad Co.....	1,694,400
Amount required for the acquisition of the Stock of the Philadelphia & Erie Railroad Co.....	4,485,200
Amount required for acquisition of the Stock of the Allegheny Valley Railway Co.....	164,000
Balance available for issue.....	7,002,700
	\$400,000,000

For the purpose of meeting the future needs of the Company, and in pursuance of the notice already given, the Shareholders will be asked to authorize additional stock to an aggregate of \$100,000,000 and its issue from time to time, under such regulations as the Board of Directors may prescribe. But as it may be to the interest of the Company to meet its corporate requirements through the issue of obligations bearing a lower rate of interest rather than through the issue of stock, authority will also be requested to increase its

indebtedness, from time to time, to the same aggregate amount, in such form as may be found most available at the time of issue. The capital requirements of the Company for the current year will be met through the issue of \$60,000,000 of three-year 5 per cent. collateral notes, this being deemed more advisable than a sale of long-term bonds at the prices now prevailing for such securities.

The prompt recognition of the growing needs of the country for increased and improved railway facilities has resulted in the greater portion of the necessary additions and improvements to your road and equipment having been made on most favorable terms, both as to the cost of the work and the rate at which the funds were secured. But the demands for increased capital from other railways, influenced by the same reasons which governed your action, and substantially from all branches of industry, have made the present rates for money exceptionally high. This, together with the increased cost of labor and material, the legislation, both State and municipal, to increase taxes, reduce rates and fares, and force upon the railways large expenditures that yield no direct return, would seem to make it a wise policy on the part of your Company to reduce its capital expenditures to a minimum, avoid new undertakings and restrict its expenditure for the present to such work as is now under way and must be completed.

The movement of both freight and passenger traffic continues to show an exceptional increase, the volume and mileage for 1906 being greatly in excess of that for 1905, and much the largest in the history of the Company.

There was a very slight increase in the average rate and in the net earnings per ton per mile. It will be noted, however, that the higher scale of wages granted to your employees only went into effect on December 1, 1906, and that there is a steady advance in the prices of all materials purchased by your Company, both of which must materially affect the cost of transportation.

After meeting all liabilities and paying dividends aggregating 6½ per cent., and the maturing principal of the car trusts, \$4,246,039.34, there was a surplus of income of \$11,301,474.54, of which \$8,701,474.54 was applied toward the Extraordinary Expenditure of the year, and \$2,500,000 transferred to an Extraordinary Expenditure Fund.

As already noted, the profit realized from the sale of securities of other companies was credited to your Profit and Loss Account; and against this profit there has been charged off on account of the cost of construction of your New York Tunnel Extension the sum of \$13,000,000, and the balance of \$2,300,848.66 transferred to the Extraordinary Expenditure Fund.

The heaviest outlays during the year, between Pittsburgh and Jersey City, in addition to that involved in the completion of this line, were upon your four-track system, yards and other terminal facilities, right of way and real estate, and the procurement of a permanent water supply.

One hundred and ninety-eight locomotives were added to your motive power, and the freight equipment of the Company was increased to the extent of 23,903 cars, through the issue of securities under the usual car trust arrangements.

The aggregate expenditures for construction, equipment and real estate during the year upon your Main Line between New York and Pittsburgh, including \$4,246,039.34 paid on account of the principal of Car Trusts, were \$30,359,302.61, of which \$17,411,788.73 was charged to capital account and \$12,300,157.01 against the income of the year. There was also charged against the income for the year the amount of \$647,356.87 advanced to the Western New York & Pennsylvania Railway for right of way and real estate, the canal and dock improvements at South Buffalo, and the construction of the Ebenezer Branch. On the branch lines the main outlay was for sidings and additional terminal facilities, and aggregated \$1,884,294.87.

The principal expenditures for the current year will be in completing the extensions of the four-track system now under way on the Middle, Pittsburgh and Western Pennsylvania Divisions, upon the Tunnel Extension into and through New York and upon the Terminal Station in that city; upon the right of way and real estate required for the relief lines referred to in the last report, and upon additional motive power and equipment.

The progress upon the Tunnel Extension has been quite satisfactory, and while the work under the East River is somewhat slower in progress, that under the Hudson River was pushed forward so successfully that on the 12th of September the laying of one of the tubes was completed through from Weehawken to Manhattan, and on the 9th of October the second tube was in place. The work of lining these tubes with concrete is now under way.

On the section between Harrison, the point east of Newark, where the Tunnel Line leaves your United New Jersey Division, and the Hudson River, many of the bridges have been constructed, and that over the Hackensack River largely completed, while the excavation on the approach to the Bergen Hill Tunnel and in the tunnel itself has made substantial progress. The excavation for the station site in New York between Seventh and Eighth avenues is practically finished, and the foundations for a number of the columns necessary to support the station and the steel viaducts are being put in place.

The work under the streets between the North and East Rivers and in Long Island City beyond the East River is about two-thirds finished, and also about one-fourth of the excavation and lining for the four tunnels under the East River.

Large expenditures were also made upon the Philadelphia, Baltimore & Washington, West Jersey & Seashore and Long Island Railroad systems.

It will be noted that the improvements, specially referred to in the report for 1902 as absolutely necessary to enable your traffic to be promptly and economically handled between Pittsburgh and New York, have, with a few exceptions, either been actually completed or are rapidly approaching completion. The completed work covers the construction of the Drilling Branch of the elevated railroad along Duquesne Way, together with the new freight station at Pittsburgh and the terminal yards adjacent to that city, the construction of the double-track freight road between Gallitzin and Petersburg and of an important part of the classification yards located thereon at Hollidaysburg, the building of the double-track low-grade freight line between York Haven and Glen Loch and of the Enola yard in connection therewith, the construction of the double-track elevated freight road through the West Philadelphia yards between the Main Line and the Delaware Extension and the Philadelphia, Baltimore & Washington Railroad, and the reduction of the grades on the Trenton Cut-off.

There is no question that but for the policy pursued by your management in this direction, it would have been impracticable to handle the enormous traffic seeking an outlet over your system; and the wisdom of making the expenditures necessary to accomplish this result has been clearly demonstrated. It must be borne in mind in this connection that in the five years from 1902 to 1907 the tonnage of the Main Line and branches has increased from about 77,000,000 tons to over 101,000,000 tons, and that of the four Grand Divisions east of Pittsburgh and Erie which are operated directly by your Company from

about 124,000,000 tons to over 172,000,000 tons. The gross earnings of the Main Line have increased in that period from about \$68,000,000 to over \$83,000,000, and of the four Grand Divisions referred to from about \$112,000,000 to over \$148,000,000, while the net income of the Company after meeting interest on bonds, leases and other liabilities has increased from about \$25,000,000 to over \$35,000,000.

In order to temporarily provide the capital needed for the heavy expenditures made during the past year upon your lines east of Pittsburgh and Erie, it was deemed wise to utilize the powers of the Pennsylvania Company and thus make it further available for the purposes of its organization. To this end that Company made an issue May 1, 1906, of \$50,000,000 of its four and one-half per cent. eighteen months collateral notes, guaranteed by your Company. The proceeds of these notes were placed to your credit, and the Pennsylvania Company has been reimbursed for these advances largely through the sale of the securities heretofore held in your treasury.

The Shareholders have heretofore been advised of the necessity for securing a permanent supply of good water for your present and future needs, and of the continued pressure for additional equipment to meet the needs of your shippers. As stated in the last report, it was intended to secure a portion of the funds required for these purposes through the sale of short-term securities similar to the car trust certificates heretofore issued. But an opportunity having offered to place a loan in France, through banking institutions of the highest credit, on satisfactory terms, the Pennsylvania Company also made an issue under date of June 15, 1906, of 250,000,000 francs, or about \$48,000,000 of its three and three-quarters per cent. trust obligations, through the Girard Trust Company as Trustee, running for fifteen years but subject to redemption at par and interest on June 15, 1918, or at any interest period thereafter. These obligations are guaranteed by your Company, and with their proceeds the Pennsylvania Company has purchased from your Company the Car Trust and Water Certificates to an amount substantially equal to the proceeds of this loan.

The charges to CAPITAL ACCOUNT during the year were as follows:

COST OF ROAD: Being expenditure on Low Grade Freight Line from York Haven to Glen Loch, on Pitcairn, Shire Oaks, Conemaugh, Hollidaysburg, Morrisville and other yards, Duquesne Way Elevated Road, extension of four-track system on Main Line, double-tracking West Pennsylvania Division and on Branches, shops, stations and other facilities.....		\$14,039,126 58
Cost of South-West Pennsylvania Railway, absorbed.....		3,026,390 00
Cost of York Haven & Rowenna Railroad, absorbed.....		1,300,000 00
		<hr/> \$18,365,516 58
EQUIPMENT: Portion of cost of 198 locomotives.....		2,822,975 86
REAL ESTATE		\$49,686 29
		<hr/> Total charges to Capital Account for 1906.....\$21,738,178 73

The increase of CAPITAL STOCK during the year was as follows:

Issued in exchange for Convertible Bonds of 1902.....	\$342,900 00
In exchange for Convertible Bonds of 1905.....	246,650 00
In exchange for Preferred Stock of Allegheny Valley Railway Co.....	2,812,900 00
Under allotment of Stock of 1900.....	1,500 00
In conversion of Dividend Scrip of May 31, 1893.....	50 00
	<hr/> \$3,404,000 00

The attention of the Shareholders has already been directed to a Resolution passed by the Congress of the United States, on the seventh of March, 1906, under which the Interstate Commerce Commission was instructed to investigate and report, among other matters, whether common carriers by rail were interested in the ownership of the coal carried over their lines, and whether any officers or employees of such carriers, charged with the duty of furnishing cars or other facilities to shippers, were interested as owners or otherwise in the coal so carried.

It having been alleged in the course of this investigation, which was made *ex parte*, and without the safeguards incident to judicial proceedings, that employees of your company had failed to do their full duty to the Shareholders of the Company and to the public, and that this had resulted from their ownership of interests in corporations doing business with your company or over its lines, a special committee of five directors was appointed to thoroughly inquire into and report upon the matters referred to. This Committee has made an exhaustive inquiry extending over several months and reported its findings to the Board, and a copy thereof, as well as of their preliminary report, has been sent to each Shareholder. The Committee find, as the final result of its examination of the whole subject committed to it, that with few exceptions the officers and employees of the companies constituting the Pennsylvania Railroad system have been faithful to duty.

As a matter of policy, however, it has been determined that it is to the interest of the Company that none of its officers or employees shall have any ownership, direct or indirect, in any company, or interest in any firm or with any individual owning or operating mines located on your system or dealing in coals produced therefrom, or in any other business where such holding might in any way conflict with their duty to the Company or the Company's duty to the public. The necessary measures have been taken to enforce compliance with this regulation.

The Board have to record with deep regret the death on December 16, 1906, of Mr. Amos R. Little, who had served continuously as one of your directors since 1888 and whose kindly personality and devotion to the interests of the Company had won the warm attachment of his associates.

On the twenty-eighth of December the Company also lost by death its President, Mr. Alexander J. Cassatt, who had filled that position since June 9, 1899. The minute adopted by the Board refers briefly to the lifelong connection of Mr. Cassatt with your service, and especially to his exceptionally important labors during his occupancy of the office of President. While that minute endeavors to record the value of his work not alone to your Company, but to the general railway interests of the country, it is difficult for words to express the feeling of regret and personal loss which the sudden and unexpected death of Mr. Cassatt brought to all those who were associated with him in the management of your affairs.

To fill the vacancy thus caused, Mr. James McCrea was elected President on the second day of January, 1907. Mr. Henry C. Frick was elected a director on the twenty-sixth day of December, 1906, in the place of Mr. Little, and Mr. Chas. E. Ingersoll on the twenty-third day of January, in the place of Mr. Cassatt.

By order of the Board,

JAMES MCCREA,
President.

Attest:
LEWIS NEILSON,
Secretary.

STOCKHOLDERS MAY OBTAIN COPIES OF THE REPORT IN PAMPHLET FORM ON AND AFTER 5th MARCH, 1907, ON APPLICATION IN PERSON OR BY LETTER TO LEWIS NEILSON, SECRETARY, ROOM 209 BROAD STREET STATION, PHILADELPHIA.

FINANCIAL NEWS

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,
Baltimore, Md., March 6.

The Baltimore stock market has been dull during the past week, with prices generally lower, in sympathy with declines in New York and in consequence of the money rate.

In the trading United Railways incomes sold at 56 to 55; the funding 5s at 85 to 83½; funding scrip at 85 to 83½; the 4s from 89½ to 90 and ex-coupon at 88 to 87½; United Light & Power 4½s, 91; Consolidated Gas, Electric Light & Power common, 35; do. preferred, 83½; Gas 6s, 104 to 103½; do. 5s, 100½; do. 4½s, 97. Seaboard Company common was dealt in at 21 to 20½; Seaboard 4s from 80 to 79½; do. 10-year 5s, 100; Consolidated Cotton Duck common, 10½ to 11; do. preferred, 32 to 31½; Cotton Duck 5s, 84½, and ex-coupon, 82 to 80; G.-B.-S. Brewing common, 7 to 6½; do. incomes, 23½ to 27½, with last sale at 26½; do. firsts, 57 to 55½.

Bank stock sold as follows: Commercial and Farmers', white certificates, 116; Western, 37; Mechanics', 26; Citizens', 31½; Baltimore, 115½; Merchants', 174; Howard, 13; Union, 115; Farmers and Merchants', 50.

Fidelity & Deposit sold at 130, and Maryland Casualty at 63½ to 64.

Other securities were traded in as follows: Atlantic Coast Line consolidated 4s, 97½ to 96; Norfolk Railway & Light 5s, 98; Northern Central Railway stock, 93½ to 92; do. fractions, 94½ to 92; Western Maryland 4s, 80 to 80½; Norfolk Railway & Light stock, 19; City & Suburban 5s, Baltimore, 108½; Georgia & Alabama consolidated 5s, 107½; Georgia, Carolina & Northern 5s, 107½ to 107½; South Bound 5s, 110½; Alabama Consolidated Coal & Iron preferred, 92½; Northern Central 5s A, 114; do. do. B, 114; Wilmington & Weldon 5s, 113½; Virginia Century, 92½; Baltimore City 3½s, 1930, 100; do. do. 1928, 100; do. do. 1945, 100½ to 100; do. 5s, 1916, W. L., 109½; Baltimore Electric Power 5s, 81½; Charleston Consolidated Electric 5s, 91½; Anacostia & Potomac 5s, 101½; City & Suburban (Washington) 5s, 103; Virginia Midland 2ds, 108; Merchants & Miners' Transportation Co., 200; Detroit United Traction 4½s, 88; Augusta Railway & Electric 5s, 101½; Consolidation Coal, 92; Baltimore Branch, 4¼; Houston Oil common, 7 to 7½; Virginia Midland 5ths, 107½; Atlanta Consolidated Street Railway 5s, 103; Norfolk Street Railway 5s, 107½.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended March 6, 1907.

Railroad Stocks.	Pr.	Bid.	Asked.
Atlantic Coast.....	100	111½	115
Atlantic Coast of Connecticut.....	250	300	300
Georgia Southern & Florida.....	100	30	30
Georgia Sou. & Fla. 1st Pfd.....	100	90	90
Norfolk Railway & Light.....	25	21	21
Seaboard Company Common.....	19½	20½	20½
Seaboard Company 1st Pfd.....	100	70	70
Seaboard Company 2d Pfd.....	100	40	44
United Railways & Elec. Co.....	50	12	13

Bank Stocks.	Pr.	Bid.	Asked.
Citizens' National Bank.....	10	31	32
Commer. & Far. White Cfs.....	100	115½	115½
Commer. & Far. Blue Cfs.....	100	125	125
Farmers & Mer. Natl. Bank.....	40	50	50
First National Bank.....	100	136	136
Maryland National Bank.....	20	18½	18½
Merchants' National Bank.....	100	172½	174
National Bank of Baltimore.....	100	115½	115½
National Howard Bank.....	10	13	13
National Marine Bank.....	30	38	38
National Mechanics' Bank.....	20	28	28
National Union Bank of Md.....	10	11	11
Old Town Bank.....	10	12	12
Third National Bank.....	100	109	109

Trust, Fidelity and Casualty Stocks.	Pr.	Bid.	Asked.
Continental Trust.....	100	190	190
Fidelity & Deposit.....	50	129½	130
Fidelity Trust.....	100	200	200
International Trust.....	100	140	150
Maryland Casualty.....	25	65	65
Maryland Trust.....	100	93	93
Maryland Trust Pfd.....	100	103	103
Mercantile Trust & Deposit.....	50	130	130
Union Trust.....	50	66	66
U. S. Fidelity & Guaranty.....	100	109	110

Miscellaneous Stocks.	Pr.	Bid.	Asked.
Ala. Con. Coal & Iron Pfd.....	100	90½	90½
Con. Cotton Duck Common.....	50	10	11
Con. Cotton Duck Pfd.....	50	31	31½
Con. Gas, Elec. Lt. & P. Com.....	34½	35	35
Con. Gas, Elec. Lt. & P. Pfd.....	84	84	84
Consolidation Coal.....	100	90½	90½
G.-B.-S. Brewing Co.....	100	6¼	7
George's Creek Coal.....	100	74	78
Merch. & Miners' Trans. Co.....	100	200	202½

Railroad Bonds.	Pr.	Bid.	Asked.
Atlanta & Charlotte Ext. 4½s.....	100½	101½	101½
Atlantic Coast Line 1st 4s, 1952.....	85½	96	96
Atlantic Coast Line (Conn.) 4s.....	87	87	87
Atlan. Coast Line (S. C.) 4s, 1948.....	89	89	89
Carolina Central 4s, 1949.....	83	83	83
Central of Georgia 3d Inc.....	63	63	63
Charleston & West. Car. 5s, 1946.....	110½	110½	110½
Coal & Iron Railway 5s, 1920.....	103	103	103
Columbia & Greenville 1st 6s, 1915.....	111	111	111
Georgia & Alabama 5s, 1945.....	107½	108	108

Georgia, Car. & North. 1st 5s, 1929.....	107½	108
Georgia Pacific 1st 6s, 1922.....	118½	118½
Georgia Sou. & Fla. 1st 5s, 1945.....	109½	109½
Norfolk & Carolina 5s, 1939.....	114½	114½
Petersburg, Class A 5s, 1926.....	111	112
Petersburg, Class B 5s, 1926.....	125½	125½
Richmond & Danville Deben.....	111½	111½
Savannah, Florida & Western 6s.....	125½	125½
Seaboard Air Line 4s, 1950.....	79½	79½
Seaboard Air Line 5s, 10-year, 1911.....	99½	100
Seaboard & Roanoke 5s, 1926.....	105	105
Virginia Midland 5th 5s, 1926.....	109½	109½
Western Maryland new 4s, 1962.....	79½	80½
Western Maryland 2d 4s.....	55	59
Western North. Car. Con. 6s, 1914.....	110½	110½
West Virginia Central 1st 6s, 1911.....	105	106
Wm. Col. & Aug. 6s, 1910.....	105½	105½
Wilmington & Wel. Gold 5s, 1935.....	113½	114

Street Railway Bonds.		
Anacostia & Potomac 5s, 1949.....	101½	102
Atlanta Con. St. Rwy. 5s.....	102	..
Augusta Rwy. & Elec. 5s, 1940.....	102	..
Baltimore City Passenger 5s, 1911.....	103½	103½
Balto., Spar. Pt. & Ches. 4½s.....	92½	93½
Charleston City Rwy. 5s, 1923.....	104½	104½
Charleston Con. Elec. 5s, 1909.....	91½	91½
City & Suburban 5s (Balto.), 1922.....	107½	108½
City & Suburban 5s (Wash.), 1948.....	103½	103½
Lake Roland Elev. 5s, 1942.....	115	115
Lexington Rwy. 1st 5s, 1949.....	100	100
Metropolitan 5s (Wash.), 1925.....	110	110
Norfolk Railway & Light 5s.....	97½	98
Norfolk Street Railway 5s, 1944.....	109	109
United Railways 1st 4s, 1949.....	87½	87½
United Railways Inc. 4s, 1949.....	54½	55
United Railways Inc. 4s, non-as.....	69½	69½
United Railways Funding 5s.....	84	84½

Miscellaneous Bonds.			
Consolidated Gas 6s, 1910.....	103½	104½	
Consolidated Gas 5s, 1939.....	109½	109½	
G.-B.-S. Brewing 1sts.....	54½	55½	
G.-B.-S. Brewing 2d Inc.....	26½	27	
Maryland Telephone 5s.....	80	80	
Mt. V. & Woodberry Cot. Duck 5s.	80	80½	
United Elec. Lt. & Power 4½s.....	91	91½	

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending March 4.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	91	95
Aiken Mfg. Co. (S. C.).....	85	88
Anderson Cotton Mills (S. C.).....	94	94
Arkwright Mills (S. C.).....	112½	115
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	112	116
Belton Mills (S. C.).....	105	110
Bibb Mfg. Co. (Ga.).....	122	122
Brandon Mills (S. C.).....	122	122
Cabarrus Cot. Mills (N. C.), new.....	120	120
Chadwick Mfg. Co. (S. C.) Pfd.....	100	100
Chiquola Mfg. Co. (S. C.).....	109½	110½
Clifton Mfg. Co. (S. C.).....	117½	117½
Clifton Mfg. Co. (S. C.) Pfd.....	103	103
Clinton Cotton Mills (S. C.).....	150	150
Columbus Mfg. Co. (Ga.).....	96	101
Courtenay Mfg. Co. (S. C.).....	100	100

Dallas Mfg. Co. (Ala.).....	90	95
Darlington Mfg. Co. (S. C.).....	82½	82½
Eagle & Phenix Mills (Ga.).....	130	135
Easley Cotton Mills (S. C.).....	132	136
Enoree Mfg. Co. (S. C.).....	80	80
Enoree Mfg. Co. (S. C.) Pfd.....	100½	100½
Enterprise Mfg. Co. (Ga.).....	90	94
Exposition Cotton Mills (Ga.).....	200	200
Gaffney Mfg. Co. (S. C.).....	95	96
Gainesville Cotton Mills (Ga.).....	47½	50
Granby Cot. Mills (S. C.) Pfd.....	90	90
Granville Mfg. Co. (Ga.).....	165	165
Greenwood Cotton Mills (S. C.).....	93	96
Grendel Mills (S. C.).....	119	120
Henrietta Mills (N. C.).....	175	175
King Mfg. Co., John P. (Ga.).....	100	103
Lancaster Cotton Mills (S. C.).....	105	107
Lancaster Cot. Mills (S. C.) Pfd.....	90	98½
Lanley Mfg. Co. (S. C.).....	92	96
Laurens Cotton Mills (S. C.).....	160	160
Limestone Mills (S. C.).....	120	123
Lockhart Mills (S. C.).....	99	102
Lockhart Mills (S. C.) Pfd.....	97	100
Louise Mills (N. C.).....	90	95
Louise Mills (N. C.) Pfd.....	98	98
Marlboro Mills (S. C.).....	90	95
Mayo Mills (N. C.).....	105	105
Mills Mfg. Co. (S. C.).....	100	101
Mills Mfg. Co. (S. C.) Pfd.....	99	101
Monaghan Mills (S. C.).....	103	105
Monarch Cotton Mills (S. C.).....	105	106
Newberry Cotton Mills (S. C.).....	126	140
Norris Cotton Mills (S. C.).....	106	110
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	80
Orr Cotton Mills (S. C.).....	100	102½
Pacolet Mfg. Co. (S. C.).....	176	176
Pacolet Mfg. Co. (S. C.) Pfd.....	101½	103
Pelzer Mfg. Co. (S. C.).....	170	175
Pelzer Mfg. Co. (S. C.) Pfd.....	170	177
Piedmont Mfg. Co. (S. C.).....	127	127
Poe Mfg. Co. (S. C.).....	127	127
Richland Cot. Mills (S. C.) Pfd.....	90	90
Ridgely Cotton Mills (N. C.).....	90	105
Roanoke Mills (N. C.).....	140	140
Saxon Mills (S. C.).....	110	110
Sibley Mfg. Co. (Ga.).....	63	65
Spartan Mills (S. C.).....	150	150
Springstein Mills (S. C.).....	100	100
Trilon Mfg. Co. (S. C.).....	130	142
Tuapau Mills (S. C.).....	180	200
Union-Buffalo Cot. Mills 1st Pfd.....	75	75
Victor Mfg. Co. (S. C.).....	120	130
Warren Mfg. Co. (S. C.).....	96	98
Warren Mfg. Co. (S. C.) Pfd.....	105	105
Washington Mills (Va.).....	30	30
Washington Mills (Va.) Pfd.....	100	115
Whitney Mills (N. C.).....	125	130
Woodruff Cotton Mills (S. C.).....	125	130
Whitney Mfg. Co. (S. C.).....	145	150

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	93	95
Aiken Cotton Mills (S. C.) Pfd.....	70	70
Aiken Mfg. Co. (S. C.).....	82	89
American Spinning Co. (S. C.).....	117	125
Anderson Cotton Mills (S. C.).....	100	100
Aradina Mills (S. C.).....	92	97
Arkwright Cotton Mills (S. C.).....	112	112
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	110	110
Belton Mills (S. C.).....	104	108
Bibb Mfg. Co. (Ga.).....	115	115
Brandon Mills (S. C.).....	128	128
Brogan Mills (S. C.).....	60	62
Calaveras Cotton Mills (N. C.).....	120	120
Chadwick Mfg. Co. (N. C.) Pfd.....	103	103
Chiquola Mfg. Co. (S. C.).....	100	102
Clifton Mfg. Co. (S. C.).....	115	120
Clifton Mfg. Co. (S. C.) Pfd.....	103	103
Clinton Cotton Mills (S. C.).....	155	155
Columbus Mfg. Co. (Ga.).....	94	97

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	93	95
Aiken Cotton Mills (S. C.) Pfd.....	70	70
Aiken Mfg. Co. (S. C.).....	82	89
American Spinning Co. (S. C.).....	117	125
Anderson Cotton Mills (S. C.).....	100	100
Aradina Mills (S. C.).....	92	97
Arkwright Cotton Mills (S. C.).....	112	112
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	110	110
Belton Mills (S. C.).....	104	108
Bibb Mfg. Co. (Ga.).....	115	115
Brandon Mills (S. C.).....	128	128
Brogan Mills (S. C.).....	60	62
Calaveras Cotton Mills (N. C.).....	120	120
Chadwick Mfg. Co. (N. C.) Pfd.....	103	103
Chiquola Mfg. Co. (S. C.).....	100	102
Clifton Mfg. Co. (S. C.).....	115	120
Clifton Mfg. Co. (S. C.) Pfd.....	103	103
Clinton Cotton Mills (S. C.).....	155	155
Columbus Mfg. Co. (Ga.).....	94	97

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	93	95
Aiken Cotton Mills (S. C.) Pfd.....	70	70
Aiken Mfg. Co. (S. C.).....	82	89
American Spinning Co. (S. C.).....	117	125
Anderson Cotton Mills (S. C.).....	100	100
Aradina Mills (S. C.).....	92	97
Arkwright Cotton Mills (S. C.).....	112	112
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	110	110
Belton Mills (S. C.).....	104	108
Bibb Mfg. Co. (Ga.).....	115	115
Brandon Mills (S. C.).....	128	128
Brogan Mills (S. C.).....	60	62
Calaveras Cotton Mills (N. C.).....	120	120
Chadwick Mfg. Co. (N. C.) Pfd.....	103	103
Chiquola Mfg. Co. (S. C.).....	100	102
Clifton Mfg. Co. (S. C.).....	115	120
Clifton Mfg. Co. (S. C.) Pfd.....	103	103
Clinton Cotton Mills (S. C.).....	155	155
Columbus Mfg. Co. (Ga.).....	94	97

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending March 4.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	93	95
Aiken Cotton Mills (S. C.) Pfd.....	70	70
Aiken Mfg. Co. (S. C.).....	82	89
American Spinning Co. (S. C.).....	117	125
Anderson Cotton Mills (S. C.).....	100	100
Aradina Mills (S. C.).....	92	97
Arkwright Cotton Mills (S. C.).....	112	112
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	110	110
Belton Mills (S. C.).....	104	108
Bibb Mfg. Co. (Ga.).....	115	115
Brandon Mills (S. C.).....	128	128
Brogan Mills (S. C.).....	60	62
Calaveras Cotton Mills (N. C.).....	120	120
Chadwick Mfg. Co. (N. C.) Pfd.....	103	103
Chiquola Mfg. Co. (S. C.).....	100	102
Clifton Mfg. Co. (S. C.).....	115	120
Clifton Mfg. Co. (S. C.) Pfd.....	103	103
Clinton Cotton Mills (S. C.).....	155	155
Columbus Mfg. Co. (Ga.).....	94	97

Courtenay Mfg. Co. (S. C.).....	92	100
Dallas Mfg. Co. (S. C.).....	92	95
Darlington Mfg. Co. (S. C.).....	84	90
D. E. Converse Co. (S. C.).....	112	95
Eagle & Phenix Mills (Ga.).....	128	135
Easley Cotton Mills (S. C.).....	130	136
Enoree Mfg. Co. (S. C.).....	75	82
Enoree Mfg. Co. (S. C.) Pfd.....	104	102
Greenville Mfg. Co. (Ga.).....	92	97
Exposition Cotton Mills (Ga.).....	174	200
Gaffney Mfg. Co. (S. C.).....	92	95
Gainesville Cotton Mills (Ga.).....	45	53
Glennwood Cotton Mills (S. C.).....	102	104
Gluck Mills (S. C.).....	94	98
Granby Cot. Mills (S. C.) 1st Pfd.....	50	50
Granville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	160	165
Grendel Mills (S. C.).....	115	115
Hartsville Cotton Mill (S. C.).....	100	103
Hennietta Mills (N. C.).....	200	200
Inman Mills (S. C.).....	97	100
King Mfg. Co., J. P. (Ga.).....	97	103
Lancaster Cotton Mills (S. C.).....	102	110
Lancaster Cot. Mills (S. C.) Pfd.....	92	99
Langley Mfg. Co. (S. C.).....	92	96
Laurens Mills (S. C.).....	152	162
Limetree Mills (S. C.).....	120	120
Lockhart Mills (S. C.).....	95	101
Lockhart Mills (S. C.).....	95	101
Loray Cotton Mills (N. C.) Pfd.....	90	105
Louise Mills (N. C.).....	90	95
Louise Mills (N. C.) Pfd.....	95	102
Marlboro Cotton Mills (S. C.).....	90	90
Mayo Mills (N. C.).....	150	200
Mills Mfg. Co. (S. C.).....	102	102
Molloy Mfg. Co. (S. C.).....	97	97
Musashan Mills (S. C.).....	104	104
Monarch Cotton Mills (S. C.).....	101	106
Newberry Cotton Mills (S. C.).....	125	125
Ninety-Six Cotton Mills (S. C.).....	95	95
Norris Cotton Mills (S. C.).....	106	106
Odell Mfg. Co. (N. C.).....	90	90
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	80
Orr Cotton Mills (S. C.).....	100	104
Pacolet Mfg. Co. (S. C.).....	92	92
Pacolet Mfg. Co. (S. C.) Pfd.....	92	104
Pelzer Mfg. Co. (S. C.).....	167	175
Piedmont Mfg. Co. (S. C.).....	167	167
Peo Mfg. Co., F. W. (S. C.).....	120	125
Raleigh Cotton Mills (N. C.).....	100	100
Richland Cot. Mills (S. C.) Pfd.....	50	50
Ronoake Mills (N. C.).....	118	118
Saxon Mills (S. C.).....	108	108
Sealey Mfg. Co. (S. C.).....	58	63
Southern Cotton Mills (S. C.).....	68	68
Spartan Mills (S. C.).....	149	152
Springstien Mills (S. C.).....	100	100
Trion Mfg. Co. (Ga.).....	132	140
Unioncapu Mills (S. C.).....	185	185
Union-Buffalo 1st Pfd.....	72	75
Union-Buffalo 2d Pfd.....	115	115
Victor Mfg. Co. (S. C.).....	97	97
Vireo Mfg. Co. (S. C.).....	97	97
Warren Mfg. Co. (S. C.) Pfd.....	106	107
Washington Mills (Va.).....	106	106
Washington Mills (Va.) Pfd.....	100	105
Whitney Mfg. Co. (S. C.).....	150	150
Wiscasset Mills (N. C.).....	119	119
Woodruff Cotton Mills (S. C.).....	127	132

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